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MONTANA STATE AIRPORT SYSTEM PLAN

APPENDIX I

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MONTANA STATE AIRPORT SYSTEM PLAN

APPENDIX I

PREFACE

This volume is Appendix I, one of five volumes that constitute the Montana State Airport System Plan.

Volume I is a general summary of the entire study, including its primary findings, intended for use by decision makers.

Volume II is the main body of the report intended for use by specialists who will evaluate and implement the plan.

Appendix I consists of three parts: (1) MSAP airports and airport classification; (2) table of unit costs; and (3) individual airport summaries including detailed aviation activity forecasts, summary and detailed cost estimates for required development by periods, along with an aerial photograph or sketch for each airport.

Appendix II consists of: (1) history and forecasts of dependent and independent variables and the forecasting equation for each air carrier airport; (2) civil aircraft types by user category classified by seating capacity and operational group; (3) individual airport financial feasibility analysis grouped by county.

Appendix III is a computerized data bank of Montana airports containing the physical and operational characteristics for the base year 1972, which is presented separately.

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APPENDIX I

INTRODUCTION

In the preparation of this appendix, page numbers have been omitted to facilitate the inclusion of additional information for individual airports without disturbing the arrangement of data presentation for any other airport. In this manner the usefullness of Appendix I as an active/live data reference manual is assured since it can be revised quickly and easily to reflect changing conditions at any or all airports.

APPENDIX I

NO. 1

NASP AIRPORTS

AND

AIRPORT CLASSIFICATION

NO. 1

NASP AIRPORTS

This appendix contains information covering the identification of the Montana airports relative to their eligibility for entry into the NASP program and their classification as determined by FAA criteria. Only general aviation airports are considered here, since all air carrier airports are, by definition, a part of the NASP program.

The Aviation Demand Factors (ADF) shown in the following summary table have been developed in accordance with FAA NASP entry criteria as contained in FAA Order 5090.3. The values shown result from the consideration of the following factors: (a) ten points for each engine on a based aircraft; (b) one hundred points per 2000 annual itinerant operations; and (c) five to one hundred points on the basis of other NASP entry criteria where appropriate. (d) For certain airports with special qualifications which did not have more than one hundred ADF points, the minimum one hundred ADF points were assigned so that these airports would be eligible for the NASP.

NATIONAL AIRPORT SYSTEM PLAN - NASP

GENERAL AVIATION AIRPORTS

AIRPORT	AERONAUTICS DEMAND FACTORS				DATE OF ENTRY IN NASP			
	1977	1982	1987	1992	1977	1982	1987	1992
ANACONDA	150	185	180	200	✓	✓	✓	✓
ASHLAND	125	145	185	185	✓	✓	✓	✓
BAKO	00	00	120	130			✓	✓
BAKER	235	285	285	330	✓	✓	✓	✓
BENCHMARK	100	100	100	100	✓	✓	✓	✓
BIG TIMBER	215	237	255	280	✓	✓	✓	✓
BOULDER	80	90	105	108			✓	✓
BROADUS	110	125	140	155	✓	✓	✓	✓
BROWNING	134	145	180	102	✓	✓	✓	✓
CHESTER	100	100	160	220	✓	✓	✓	✓
CHINOOK	270	285	310	340	✓	✓	✓	✓
CHOTEAU	140	145	185	175	✓	✓	✓	✓
CIRCLE	150	200	250	300	✓	✓	✓	✓
COLUMBUS	150	180	200	225	✓	✓	✓	✓
CONRAD	300	400	450	500	✓	✓	✓	✓
CULBERTSON	180	200	250	300	✓	✓	✓	✓
CUT BANK	515	570	625	680	✓	✓	✓	✓
DEER LODGE	105	152	105	100	✓	✓	✓	✓
DILLON	310	555	635	715	✓	✓	✓	✓
DRUMMOND	100	103	110	135	✓	✓	✓	✓
EKALAKA	100	125	150	180	✓	✓	✓	✓
ENNIS	200	320	350	400	✓	✓	✓	✓
EUREKA	105	205	220	240	✓	✓	✓	✓
FAIRVIEW	00	05	80	113				✓
FORSYTH	205	230	255	280	✓	✓	✓	✓
FORT BENTON	215	225	245	255	✓	✓	✓	✓
GERALDINE	135	155	170	105	✓	✓	✓	✓
HAMILTON	055	753	045	080	✓	✓	✓	✓
HARDIN	285	305	325	345	✓	✓	✓	✓
HARLEM	100	105	215	235	✓	✓	✓	✓
HARLOWTON	100	100	120	130	✓	✓	✓	✓

AIRPORT	AERONAUTICS DEMAND FACTORS				DATE OF ENTRY IN NASP			
	1977	1982	1987	1992	1977	1982	1987	1992
HOT SPRINGS	85	00	100	120			✓	✓
JORDAN	120	145	185	225	✓	✓	✓	✓
KALISPELL (CITY)	850	845	1070	1205	*	*	*	*
LAUREL	250	320	415	520	✓	✓	✓	✓
LIMY	375	415	480	515	✓	✓	✓	✓
LINCOLN	100	110	130	152	✓	✓	✓	✓
LIVINGSTON	380	400	450	500	✓	✓	✓	✓
MALTA	140	230	270	325	✓	✓	✓	✓
PHILIPSBURG	240	355	370	375	✓	✓	✓	✓
PLAINS	120	140	180	180	✓	✓	✓	✓
PLENTYWOOD	270	305	400	440	✓	✓	✓	✓
POLSON	290	350	500	705	✓	✓	✓	✓
POPLAR	105	121	140	155	✓	✓	✓	✓
RED LODGE	210	235	255	280	✓	✓	✓	✓
ROUNDUP	100	205	230	280	✓	✓	✓	✓
ST. IGNATIUS	84	80	100	112			✓	✓
SCOBEY	100	150	200	255	✓	✓	✓	✓
SHELBY	340	375	415	485	✓	✓	✓	✓
STANFORD	00	75	00	105			.	✓
STEVENSVILLE	100	130	180	204	✓	✓	✓	✓
SUPERIOR	100	100	120	140	✓	✓	✓	✓
TEBBY	100	100	110	120	✓	✓	✓	✓
THREE FORKS	115	120	135	140	✓	✓	✓	✓
TOWNSEND	100	115	135	155	✓	✓	✓	✓
TROY	72	70	150	100			✓	✓
TURNER	75	80	100	100			✓	✓
TWIN BRIDGES	150	155	180	105	✓	✓	✓	✓
VALIER	115	135	155	175	✓	✓	✓	✓
WHITE SULPHUR SPRING	150	180	170	200	✓	✓	✓	✓
WISDOM	75	80	124	154			✓	✓

* NOT IN N A S P. (LESS THAN 20 GROUND MILES TO GLACIER PARK INTERNATIONAL AIRPORT)

NO. 1

AIRPORT CLASSIFICATION

General Aviation

In the following table all general aviation airports have been classified in one or another of the following classifications as established by the FAA.

F3 - Feeder System-Aeronautical Density Low

BU - Basic Utility

GU - General Utility

BT - Basic Transport

GT - General Transport

*MS - Montana Strip

**U - Unclassified

* - ADF points are less than 100
** - ADF points never exceed 25 and no based aircraft

Air Carrier

System Role is in accordance with classification by enplaned passengers and total operations: primary, secondary and feeder.

Airport Category	(NASP Codes)	Public Service Level (Annual Enplanned Passengers)	Aeronautical Operational Density (Annual Aircraft Operations)
Primary System		More than 1,000,000	
High Density	(P1)		More than 350,000
Medium Density	(P2)		250,000 to 350,000
Low Density	(P3)		Less than 250,000
Secondary System		50,000 to 1,000,000	
High Density	(S1)		More than 250,000
Medium Density	(S2)		100,000 to 250,000
Low Density	(S3)		Less than 100,000
Feeder System		Less than 50,000	
High Density	(F1)		More than 100,000
Medium Density	(F2)		20,000 to 100,000
Low Density	(F3)		Less than 20,000

Source: AC 150/5090-2

Operational Role is in accordance with classification by length of haul and specific aircraft groups (by runway length requirement)

Aircraft Groups	Length of Haul	Code
A		
B-747		
DC-8		
B-707	1-Over 1,500 Miles	A1
VC-10	2-500 - 1,500 Miles	A2
C-5A	3-0-500 Miles	A3
Future		
SST		
B		
B-727		
B-737	1-Over 1,500 Miles	B1
DC-10	2-500-1,500 Miles	B2
L-1011	3-0-500 Miles	B3
BAC-1-11		
DC-9		
C		
L-188		
F-27		
F-227	1-*	
YS-11	2-500-1,500 Miles	C2
CV-580	3-0-500 Miles	C3
M-404		
V-724		

OTHER CERTIFIED, SCHEDULED, AIR CARRIER SERVICE

TYPE	CODE
Temporary Suspension	A4, B4, C4, H4, S4, V4
Airline Using Light Aircraft	C5
Helicopter	HA
STOL	SA
VTOL	VA
Seaplane	CA

Source: FAA Order 5090.3

GENERAL AVIATION AIRPORT CLASSIFICATIONS

AIRPORT	CLASSIFICATION									
	1972		1977		1982		1987		1992	
ARACOMA	F3	BU	F3	UU	F3	BU	F3	UU	F3	BU
AZULAKU	F3	BB	F3	UU	F3	UU	F3	BB	F3	BB
AUGUSTA	F3	NS	F3	NS	F3	NS	F3	NS	F3	NS
BABB	F3	NS	F3	NS	F3	NS	F3	BU	F3	BB
BAKEU	F3	BU	F3	BU	F3	BU	F3	BB	F3	BB
BENCHMARB	F3	UU	F3	BU	F3	BU	F3	BU	F3	BU
BIU SANDY	F3	NS	F3	NS	F3	NS	F3	NS	F3	NS
BIU TIMBER	F3	BU	F3	BB	F3	BU	F3	BU	F3	UU
BOULDER	F3	NS	F3	NS	F3	NS	F3	BB	F3	BU
BUTTGER	F3	NS	F3	NS	F3	NS	F3	NS	F3	NS
BUUARDS	F3	BU	F3	BU	F3	BB	F3	BU	F3	BB
BOOMING	F3	BU	F3	BU	F3	BB	F3	BU	F3	BB
CABTEU	U		B		U		U		U	
CHESTEU	F3	BB	F3	BB	F3	BU	F3	BB	F3	BU
CHIBOOK	F3	BB	F3	BU	F3	BU	F3	UU	F3	BB
COUTEAU	F3	BU	F3	BU	F3	BB	F3	BU	F3	BU
CIBCLE	F3	BB	F3	BB	F3	BU	F3	UU	F3	BB
CLINTUN	F3	NS	F3	NS	F3	NS	F3	NS	F3	NS
CULUMBUS	F3	BU	F3	BU	F3	BB	F3	BB	F3	BB
COBBON	F3	NS	F3	NS	F3	NS	F3	NS	F3	NS
COBBAD	F3	BU	F3	BU	F3	BB	F3	BU	F3	BB
COLBERTSBU	F3	BU	F3	BU	F3	GU	F3	GU	F3	GU
CUT BANK	F3	UU	F3	BU	F3	BB	F3	GU	F3	BT
DEEN LODGE	F3	BB	F3	BU	F3	BB	F3	BB	F3	BB
DELL	F3	NS	F3	NS	F3	NS	F3	NS	F3	NS
DENTUN	F3	NS	F3	NS	F3	NS	F3	NS	F3	NS
DILLON	F3	BU	F3	BB	F3	BU	F3	GB	F3	BT
DRUMMOND	F3	BU	F3	BU	F3	BU	F3	BU	F3	BU
DUTTON	F3	NS	F3	NS	F3	NS	F3	NS	F3	NS
EAST POPLAR	F3	NS	F3	NS	F3	NS	F3	NS	F3	NS

AIRPORT	CLASSIFICATION									
	1972		1977		1982		1987		1992	
EBALARA	F3	NS	F3	NS	F3	NS	F3	NS	F3	NS
EDDIS	F3	BU	F3	BB	F3	BB	F3	BB	F3	UU
EDDEKA	F3	BU	F3	BB	F3	BB	F3	BU	F3	UU
FAIRFIELD	F3	NS	F3	NS	F3	NS	F3	NS	F3	NS
FAIRVIEW	F3	NS	F3	NS	F3	NS	F3	NS	F3	UU
FORSYTH	F3	BB	F3	GU	F3	GB	F3	GU	F3	GB
FORT BENTON	F3	UU	F3	BU	F3	BB	F3	BU	F3	UB
FORTINE	F3	NS	F3	NS	F3	NS	F3	NS	F3	NS
FT. SMITH	F3	NS	F3	NS	F3	NS	F3	NS	F3	NS
GERALDINE	F3	BU	F3	BB	F3	BB	F3	BB	F3	BB
GRASSBADGE	U		U		U		B		U	
HAMILTON	F3	BU	F3	BB	F3	BU	F3	GB	F3	BT
HARDIU	F3	BB	F3	BB	F3	BB	F3	UU	F3	BB
HARLEM	F3	BB	F3	BU	F3	BB	F3	BU	F3	BU
HARLOWTON	F3	BU	F3	BB	F3	BB	F3	UU	F3	BB
HINSDALE	B		U		U		U		U	
UOT SPRINGS	F3	NS	F3	NS	F3	NS	F3	UU	F3	BU
HYSHAM	F3	NS	F3	NS	F3	NS	F3	NS	F3	NS
JACKSON	U		B		U		U		U	
JOUDAN	F3	BU	F3	BU	F3	BU	F3	BU	F3	BU
KALISPELL (CITY)	F3	BU	F2	BB	F2	UU	F2	BU	F2	BU
LAUUEL	F3	BU	F3	BU	F3	BU	F3	BU	F3	BU
LAVIDA	F3	NS	F3	NS	F3	NS	F3	NS	F3	NS
LIUDY	F3	BB	F3	BB	F3	BB	F3	BU	F3	GU
LIUCOLN	F3	BB	F3	BB	F3	BB	F3	BU	F3	BU
LIVINGSTON	F3	BB	F3	BB	F3	GB	F3	GB	F3	GB
MALTA	F3	BB	F3	BB	F3	BB	F3	BB	F3	BB
MEADOW CREEK	B		U		F3	NS	F3	NS	F3	NS
MEDICINE LABE	U		U		F3	NS	F3	NS	F3	NS
MORGAN	U		U		F3	NS	F3	NS	F3	NS

GENERAL AVIATION AIRPORT CLASSIFICATIONS

AIRPORT	CLASSIFICATION									
	1972		1977		1982		1987		1992	
OPHEIM	F3	MS	F3	MS	F3	MS	F3	MS	F3	MS
PEERLESS	U		U		U		U		U	
PHILLIPSBURG	F3	BU	F3	BU	F3	BU	F3	BU	F3	BU
PLAINS	F3	BU	F3	BU	F3	BU	F3	BU	F3	BU
PLENTYWOOD	F3	BU	F3	BU	F3	BU	F3	BU	F3	GU
POLEBRIDGE (SONDERSON)	U		U		U		U		U	
POLSON	F3	BU	F3	GU	F3	GU	F3	GU	F3	GU
POPLAR	F3	BU	F3	BU	F3	BU	F3	BU	F3	BU
RED LODGE	F3	BU	F3	BU	F3	BU	F3	BU	F3	BU
RICHEY	U		U		U		U		U	
ROMAN	F3	MS	F3	MS	F3	MS	F3	MS	F3	MS
ROUNDUP	F3	BU	F3	BU	F3	BU	F3	BU	F3	BU
RYEGATE	F3	MS	F3	MS	F3	MS	F3	MS	F3	MS
ST. IGNATIUS	F3	MS	F3	MS	F3	MS	F3	BU	F3	BU
SCHAFER	U		U		U		F3	MS	F3	MS
SCOBEY	F3	BU	F3	BU	F3	BU	F3	BU	F3	BU
SEELY LAKE	F3	MS	F3	MS	F3	MS	F3	MS	F3	MS
SHELBY	F3	BU	F3	BU	F3	GU	F3	GU	F3	GU
SPOTTED BEAR	U		F3	MS	F3	MS	F3	MS	F3	MS
STANFORD	F3	MS	F3	MS	F3	MS	F3	MS	F3	BU
STEVENSVILLE	F3	BU	F3	BU	F3	BU	F3	BU	F3	BU
SUNBURST	U		U		U		U		U	
SUPERIOR	F3	BU	F3	BU	F3	BU	F3	BU	F3	BU
SWEETGRASS	F3	MS	F3	MS	F3	MS	F3	MS	F3	MS
TERRY	F3	BU	F3	BU	F3	BU	F3	BU	F3	BU
THOMPSON FALLS	F3	MS	F3	MS	F3	MS	F3	MS	F3	MS
THREE FORKS	F3	BU	F3	BU	F3	BU	F3	BU	F3	BU
TIBER DAM	U		U	*	F3	MS	F3	MS	F3	MS
TOWNSEND	F3	BU	F3	BU	F3	BU	F3	BU	F3	BU
TOWNSEND CANYON	F3	MS	F3	MS	F3	MS	F3	MS	F3	MS

AIRPORT	CLASSIFICATION									
	1972		1977		1982		1987		1992	
TROY	F3	MS	F3	MS	F3	MS	F3	BU	F3	BU
TURNER	F3	MS	F3	MS	F3	MS	F3	BU	F3	BU
TWIN BRIDGES	F3	BU	F3	BU	F3	BU	F3	BU	F3	BU
VALIER	F3	BU	F3	BU	F3	BU	F3	BU	F3	BU
WHITEFISH	F3	MS	F3	MS	F3	MS	F3	MS	F3	MS
WHITE SULPHUR SPRING	F3	BU	F3	BU	F3	BU	F3	BU	F3	BU
WILSALL	U		U		U		U		U	
WINIFRED	F3	MS	F3	MS	F3	MS	F3	MS	F3	MS
WISDOM	F3	MS	F3	MS	F3	MS	F3	BU	F3	BU
WOLF CREEK	F3	MS	F3	MS	F3	MS	F3	MS	F3	MS

AIR CARRIER AIRPORT CLASSIFICATIONS

AIRPORT	CLASSIFICATIONS - OPERATIONAL (DOM. & SUB.) AND SYSTEM														
	1973			1977			1982			1987			1992		
	DOM.	SUB.	SYST.	DOM.	SUB.	SYST.	DOM.	SUB.	SYST.	DOM.	SUB.	SYST.	DOM.	SUB.	SYST.
BILLINGS	B-2	BT	S-2	B-2	GT	S-2	B-2	B-3	S-2	B-1	B-3	S-2	B-1	B-3	S-1
BOZEMAN	BU	B-3	F-2	GU	B-3	F-2	GU	B-3	S-3	B-2	BT	S-3	B-2	GT	S-3
BUTTE	BU	B-3	F-2	BU	B-3	F-2	GU	B-3	S-3	GU	B-3	S-3	B-3	BT	S-2
GLASGOW	BU	C-5	F-3	BU	C-5	F-3	GU	C-5	F-3	GU	C-5	F-3	BT	C-5	F-3
GLENDIVE	BU	C-5	F-3	BU	C-5	F-3	GU	C-5	F-3	GU	C-5	F-3	BT	C-5	F-3
GREAT FALLS	B-3	GU	S-2	B-2	BT	S-2	B-2	GT	S-2	B-2	GT	S-2	B-2	B-3	S-2
HAVRE	BU	C-5	F-3	BU	C-5	F-3	BU	C-5	F-3	GU	C-5	F-3	GU	C-5	F-3
HELENA	BU	B-3	F-2	BU	B-3	F-2	GU	B-3	S-3	GU	B-3	S-3	B-3	BT	S-3
KALISPELL - G.P.I.	BU	B-3	F-2	BU	B-3	F-2	GU	B-3	F-2	B-3	GU	S-3	B-3	BT	S-3
LEWISTOWN	BU	C-5	F-3	BU	C-5	F-3	BU	C-5	F-3	BU	C-5	F-3	GU	C-5	F-3
MILES CITY	BU	C-5	F-3	BU	C-5	F-3	GU	C-5	F-3	GU	C-5	F-3	BT	C-5	F-3
MISSOULA	BU	B-3	F-2	GU	B-3	S-2	B-3	BT	S-2	B-3	BT	S-2	B-3	GT	S-2
SIDNEY	BU	C-5	F-3	BU	C-5	F-3	GU	C-5	F-3	GU	C-5	F-3	BT	C-5	F-3
WEST YELLOWSTONE	B-3	BU	F-3	B-3	BU	F-3	B-3	GU	F-2	B-3	GU	F-2	B-3	BT	F-2
WOLF POINT	BU	C-5	F-3	BU	C-5	F-3	GU	C-5	F-3	GU	C-5	F-3	BT	C-5	F-3

APPENDIX I

NO. 2

TABLE OF UNIT

COSTS

UNIT PRICES USED IN ESTIMATING DEVELOPMENT COSTS

ITEM	COST UNIT	MS	BU	GU	BT	GT	AIR CARRIER
LAND ACQUISITION	ACRE	$ 200.00	$ 200.00	$ 200.00	$ 1000.00	$ 1000.00	$ 1000.00
LAND EASEMENT	ACRE	80.00	80.00	80.00	300.00	300.00	300.00
SITE PREPARATION							
CLEARING & GRUBBING	S.Y.	0.50	0.50	0.50	0.80	0.80	0.80
	ACRE	1050.00	1050.00	1050.00	1250.00	1250.00	1250.00
EXCAVATION & EMBANKMENT							
LANDING STRIP	C.Y.	1.50	1.50	1.50	1.50	1.50	1.50
TAXIWAY	C.Y.	1.50	1.50	1.50	1.50	1.50	1.50
END ZONE	C.Y.	1.50	1.50	1.50	1.50	1.50	1.50
OTHER	C.Y.	1.50	1.50	1.50	1.50	1.50	1.50
OBSTRUCTION REMOVAL							
FENCES	LIN. FT.	0.50	0.50	0.50	0.50	0.50	0.50
BUILDINGS	S.F.	5.00	5.00	5.00	5.00	5.00	5.00
DRAINAGE							
CULVERTS	LIN. FT.	8.00	8.00	8.00	8.00	8.00	8.00
DITCHES	LIN. FT.	3.00	3.00	3.00	3.00	3.00	3.00
PAVEMENT							
RUNWAY	S.Y.	8.00	8.00	8.00	9.00	9.00	13.60
TAXIWAY	S.Y.	8.00	8.00	8.00	9.00	9.00	13.60
OVERLAYS (4 IN.)	S.Y.	4.55	4.55	4.55	4.55	4.55	4.55
LIGHTING							
MIRL	LIN. FT.	8.80	8.80	8.80	8.80	8.80	8.80
HIRL	LIN. FT.	11.00	11.00	11.00	11.00	11.00	11.00
LANDING AIDS							
VASI 12	EACH	---	---	---	15000.00	15000.00	15000.00
VASI 1Y	EACH	---	---	---	---	---	20000.00
MALS	EACH	5000.00	5000.00	5000.00	20000.00	20000.00	20000.00
REILS (1 SET - TWO LIGHTS)	EACH	10000.00	10000.00	10000.00	10000.00	10000.00	10000.00
NAVAIDS							
TVOR	EACH	45,000.00	45,000.00	45,000.00	45,000.00	45,000.00	45,000.00
ILS	EACH	---	---	---	---	---	330,000.00
NDB	EACH	8,000.00	8,000.00	8,000.00	8,000.00	8,000.00	8,000.00
CONTROL TOWER	EACH	---	---	---	---	---	300,000.00
BEACONS	EACH	5,000.00	5,000.00	5,000.00	5,000.00	5,000.00	5,000.00
OBSTRUCTION LIGHTS	EACH	5,000.00	5,000.00	5,000.00	5,000.00	5,000.00	5,000.00
PUBLIC UTILITIES							
ELECTRICITY	S.F. of BLDG.	3.51	3.51	3.51	3.51	3.51	3.51
WATER	L.F. of MAIN	32.00	32.00	32.00	40.00	40.00	50.00
SEWER	L.F. of MAIN	5.50	5.50	5.50	7.00	7.00	8.00
UNDERGROUND INSTALLATIONS							
POWER LINES	LIN. FT.	2.00	2.00	2.00	2.00	2.00	2.00
TELEPHONE	LIN. FT.	2.00	2.00	2.00	2.00	2.00	2.00

UNIT PRICES USED IN ESTIMATING DEVELOPMENT COSTS

ITEM	COST UNIT	MS	BU	GU	BT	GT	AIR CARRIER
AIR CARRIER							
TERMINAL BUILDING	S.F.	30.00	30.00	30.00	30.00	30.00	30.00
CARGO TERMINAL BUILDING	S.F.	15.00	15.00	15.00	15.00	15.00	15.00
A/C LOADING POSITIONS	NA	0.00	0.00	0.00	0.00	0.00	0.00
LOADING & BYPASS APRON AREA	S.Y.	9.00	9.00	9.00	9.00	9.00	9.00
PUBLIC PARKING SPACES	NA	0.00	0.00	0.00	0.00	0.00	0.00
PUBLIC PARKING AREA	S.Y.	6.00	6.00	6.00	6.00	6.00	6.00
MAINTENANCE AREA	S.Y.	9.00	9.00	9.00	9.00	9.00	9.00
MAINTENANCE BUILDINGS	S.F.	15.00	15.00	15.00	15.00	15.00	15.00
FIRE & EMERGENCY EQUIPMENT BUILDING	S.F.	15.00	15.00	15.00	15.00	15.00	15.00
NO. FIRE & RESCUE VEHICLES	K/VEHICLES	---	---	----	---	---	43,000.00
GENERAL AVIATION							
TERMINAL BUILDING	S.F.	10.00	10.00	10.00	10.00	10.00	10.00
A/C LOADING POSITIONS	NA	0.00	0.00	0.00	0.00	0.00	0.00
LOADING & BYPASS APRON AREA	S.Y.	6.00	6.00	6.00	6.00	6.00	6.00
ITINERATE AIRCRAFT PARKING AREA	S.Y.	6.00	6.00	6.00	6.00	6.00	6.00
BASED AIRCRAFT TIE-DOWN AREA	S.Y.	6.00	6.00	6.00	6.00	6.00	6.00
CONVENTIONAL HANGAR BLDG. & APRON	S.Y.	15.00	15.00	15.00	15.00	15.00	15.00
"T" HANGAR AREA & BUILDING	S.Y.	10.00	10.00	10.00	10.00	10.00	10.00
PUBLIC VEHICLE PARKING SPACES	NA	0.00	0.00	0.00	0.00	0.00	0.00
PUBLIC VEHICLE PARKING AREA	S.Y.	6.00	6.00	6.00	6.00	6.00	6.00
MAINTENANCE APRON AREA	S.Y.	9.00	9.00	9.00	9.00	9.00	9.00
MAINTENANCE BUILDING	S.Y.	10.00	10.00	10.00	10.00	10.00	10.00

APPENDIX I

NO. 3

INDIVIDUAL AIRPORT

SUMMARY SHEETS

NO. 3

INDIVIDUAL AIRPORT SUMMARY SHEETS

This appendix contains a description and aerial photograph or sketch of each airport as it presently exists.

The majority of aerial photos were obtained from the Montana Highway Commission. Others were obtained through the Montana Aerial Photograph Company of Missoula. Where aerial photos did not yield a clear airport view sketches of airports from the Montana Airport directory were reproduced.

Computer printouts are included, showing the land side and air side requirements and costs necessary to develop each airport to meet the aviation demand as forecast for each five year period through 1992.

Individual costs summary sheets are included, showing the cost for each five year period as developed for land side and air side and the anticipated amount of Federal and State/Local participation in these costs.

In the cost summaries the period "Before 1977" was shown to represent those requirements which are due to present day difficiencies. Those costs added to figures shown for "1977" will total the requirements for 1973-1977. "1982" costs are projected for 1978-1982, "1987" costs are those projected for 1983-1987, and "1992" are those projected for 1988-1992.

BILLINGS

The city of Billings is situated in southern Montana, 60 miles east of the Rocky Mountains. It is the largest city within a 500 mile radius. The Yellowstone River flows through the east side of the city and the Crow Indian Reservation is located a short distance to the southeast. Interstate 94 and 90 provide access to the northeast and west, respectively. Interstate 90 east and south through the Crow Reservation to Wyoming will be completed by 1990. Amtrak serves Billings with passenger service three days a week between Forsyth and Livingston.

Logan Field is located on a plateau area north of the city. This airport will continue to be the largest air carrier facility in Montana. The present 'A' type aircraft fleet will increase at a uniform rate throughout the forecast period and reflects the need to extend the present runway as shown in the cost requirement tables. The substantial increase in air carrier operations is expected to have only a small effect upon the environment of the east side of Billings. This reasoning is due to the fact that Logan Field is on an elevation 200' higher than the city.

Facility Requirements

The Billings Master plan was formulated in 1969 and is now being revised. The figures in the cost tables herein utilize the master plan where possible.

The total peak hour VFR demand after 1977 would require the addition of a short parallel general aviation runway. The present IFR minima are 200/½ mile and the existing IFR capacity is adequate.

Billings is forecasted to require substantial terminal expansion for each benchmark period. By 1982 this will necessitate additional gross land area for the terminal complex.

It is recommended that a detailed master plan study to consider development of the area adjacent to the west, be initiated without delay. The development would be in conjunction with the addition of the parallel general aviation runway within the same general area.

Runway 9/27 should be slightly lengthened to properly accommodate expected aircraft.

Detailed items are shown on the following pages.

Name: BILLINGS

Site Number:. 12265

County: YELLOWSTONE

District:. 7

PEAK HOUR IFR AND VFR DEMAND FORECASTS

	1977	1982	1987	1992
BILLINGS, MONTANA				
TOTAL PEAK HOUR VFR DEMAND	103.	120.	143.	173.
GA IFR PEAK HOUR DEMAND	8.	12.	17.	23.
AC AND GA IFR PH DEMND	22.	27.	33.	41.

OPERATIONAL DATA

DEMAND FORECAST INDICATORS

		1977	1982	1987	1992
1	AIR CARRIER PEAK HOUR PASSENGERS	414.0	650.0	700.0	900.0
2	TOTAL AIR CARRIER ANNUAL OPERATIONS	22720.0	25158.0	31532.0	35142.0
3	AIR CARRIER PEAK HOUR OPERATIONS	14.0	15.0	16.0	18.0
4	AIR CARRIER AVERAGE TURN-AROUND TIME	33.0	35.0	36.0	37.0
5	ANNUAL AIR CARGO(FR* EX* MAIL)	2382.0	3172.0	4262.0	5802.0
6	PERCENT OF AIRCRAFT TYPE*X*	0.0	0.0	0.0	0.0
7	PERCENT OF AIRCRAFT TYPE*X-1*	0.0	0.0	7.0	13.0
8	PERCENT OF AIRCRAFT TYPE*L*	41.0	41.0	38.0	36.0
9	PERCENT OF AIRCRAFT TYPE*M*	30.0	29.0	28.0	28.0
10	PERCENT OF AIRCRAFT TYPE*S AND T*	33.0	30.0	27.0	23.0
11	TOTAL GA ANNUAL OPERATIONS	137800.0	169057.0	212181.0	265088.0
12	GA PEAK HOUR OPERATIONS	89.0	105.0	127.0	159.0
13	PERCENT GA ITINERANT OPERATIONS	50.0	53.0	55.0	57.0
14	BASED AIRCRAFT UNDER 12500 LBS	230.0	255.0	279.0	304.0
15	BASED AIRCRAFT OVER 12500 LBS	5.0	5.0	6.0	6.0

AIRCRAFT MIX AND CAPACITY FORECASTS

	1972	1977	1982	1987	1992
AIRCRAFT TYPE *A*	2	4	6	8	10
AIRCRAFT TYPE *B*	21	21	23	25	27
AIRCRAFT TYPE *C*	6	11	13	15	17
AIRCRAFT TYPE *D-E*	71	64	58	52	46
HOURLY CAPACITY VFR	86	95	105	105	105
HOURLY CAPACITY IFR	52	59	66	66	66
ANNUAL CAPACITY(000)	151	186	226	252	274

DEVELOPMENT COST SUMMARY

PLAN PERIOD	PARTICIPATION	LAND SIDE	AIR SIDE	TOTAL
BEFORE 1977	FEDERAL			
	STATE/LOCAL			
	TOTAL			
1977	FEDERAL	$ 166,000	$ 375,000	$ 541,000
	STATE/LOCAL	564,000	97,000	661,000
	TOTAL	730,000	472,000	1,202,000
1982	FEDERAL	56,000	1,629,000	1,685,000
	STATE/LOCAL	1,621,000	445,000	2,066,000
	TOTAL	1,677,000	2,074,000	3,751,000
1987	FEDERAL	47,000		47,000
	STATE/LOCAL	403,000		403,000
	TOTAL	450,000		450,000
1992	FEDERAL	89,000		89,000
	STATE/LOCAL	1,437,000		1,437,000
	TOTAL	1,526,000		1,526,000
TOTAL COSTS TO 1992	FEDERAL	358,000	2,004,000	2,362,000
	STATE/LOCAL	4,025,000	542,000	4,567,000
	TOTAL	4,383,000	2,546,000	6,929,000

BILLINGS

MSASP AIRFIELD DEVELOPMENT COSTS IN THOUSANDS OF 1972 DOLLARS

BILLINGS

AIRSIDE

		FED SHARE	TOTAL	FED GRANTS	STATE/LOCAL
	1977				
1	EXTEND R W (9-27)				
	A EARTHWORK	79.46	33.00	26.22	6.77
	B EASEMENTS	79.46	4.50	3.57	0.92
	C SITE PREP.	79.46	45.00	35.75	9.24
	D DRAINAGE	79.46	5.00	3.97	1.02
	E PAVING	79.46	385.00	305.92	79.07
	TOTAL ($000)		472.52	375.47	97.07
	1982				
2	LANDING AIDS R/W(9-27)				
	A VASI 2 EACH	79.46	40.00	31.78	8.21
3	PARALLEL Gx Ax RUNWAY				
	A LAND ACQUISITION	79.46	90.00	71.51	18.48
	B EARTHWORK	79.46	30.00	23.83	6.16
	C PAVING	79.46	390.00	309.89	80.10
4	ACCESS ROAD TO NEW AREA	0.00	24.00	0.00	24.00
5	RELOC.HANGARS,ADD APRONS	79.46	1500.00	1191.89	308.10
	TOTAL ($000)		2074.02	1628.95	445.10
	TOTAL PROJECT COSTS		2546.55	2004.43	542.17

LANDSIDE

FEDERAL SHARE OF THE PROJECT COSTS

		FED SHARE	1977	1982	1987	1992
1	AIR CARRIER TERMINAL AREA(SF)	0.00	0.	0.	0.	0.
2	AIR CARRIER CARGO TERMINAL AREA(SF)	0.00	0.	0.	0.	0.
3	AIRLINE AC LOADING POSITIONS(NO.)	0.00	0.	0.	0.	0.
4	AC LOADING & BYPASS APRON AREAS(SY)	79.46	16091.	27676.	9225.	47879.
5	AC PUBLIC AUTO PARKING SPACES(NO.)	0.00	0.	0.	0.	0.
6	AC PUBLIC AUTO PARKING AREAS(SY)	0.00	0.	0.	0.	0.
7	AIRPORT MAINTENANCE APRON AREA (SY)	79.46	23711.	7229.	10619.	12125.
8	AIRPORT MAINTENANCE BUILDING(SF)	0.00	0.	0.	0.	0.
9	FIRE & EMERGENCY EQUIPMENT BUILDING(SF)	79.46	28605.	0.	0.	0.
10	NUMBER OF FIRE AND RESCUE VEHICLES	82.00	35260.	0.	0.	0.
11	GA TERMINAL BUILDING AREA(SF)	0.00	0.	0.	0.	0.
12	GA AIRCRAFT LOADING POSITIONS(NUMBER)	0.00	0.	0.	0.	0.
13	GA AC LOADING & BYPASS APRON AREA(SY)	79.46	0.	0.	0.	0.
14	ITINERANT AIRCRAFT PARKING AREA(SY)	79.46	0.	5435.	8510.	10942.
15	GA BASED AIRCRAFT TIE-DOWN AREA(SY)	79.46	39335.	10429.	11085.	10429.
16	GA CONV HANGAR BLDG AND APRON AREA(SY)	79.46	0.	0.	0.	0.
17	GA #T# HANGAR BLDG & APRON AREA(SY)	79.46	0.	0.	0.	0.
18	GA PUBLIC VEHICULAR PARKING SPACE(NO.)	0.00	0.	0.	0.	0.
19	GA PUBLIC VEHICULAR PARKING AREA(SY)	0.00	0.	0.	0.	0.
20	AIRPORT MAINTENANCE APRON AREA(SY)	79.46	22959.	4819.	7079.	8083.
21	AIRPORT MAINTENANCE BUILDING(SF)	0.00	0.	0.	0.	0.
	TOTAL IN THOUSANDS OF DOLLARS		166.0	55.6	46.5	89.5

PROJECT COST LESS FEDERAL GRANTS

		FED SHARE	1977	1982	1987	1992
1	AIR CARRIER TERMINAL AREA(SF)	0.00	178200.	1486800.	315000.	1260000.
2	AIR CARRIER CARGO TERMINAL AREA(SF)	0.00	0.	0.	0.	0.
3	AIRLINE AC LOADING POSITIONS(NO.)	0.00	0.	0.	0.	0.
4	AC LOADING & BYPASS APRON AREAS(SY)	79.46	4159.	7154.	2384.	12376.
5	AC PUBLIC AUTO PARKING SPACES(NO.)	0.00	0.	0.	0.	0.
6	AC PUBLIC AUTO PARKING AREAS(SY)	0.00	164268.	79002.	20780.	83160.
7	AIRPORT MAINTENANCE APRON AREA (SY)	79.46	6129.	1868.	2745.	3134.
8	AIRPORT MAINTENANCE BUILDING(SF)	0.00	0.	0.	0.	0.
9	FIRE & EMERGENCY EQUIPMENT BUILDING(SF)	79.46	7394.	0.	0.	0.
10	NUMBER OF FIRE AND RESCUE VEHICLES	82.00	7740.	0.	0.	0.
11	GA TERMINAL BUILDING AREA(SF)	0.00	84375.	22000.	30250.	38500.
12	GA AIRCRAFT LOADING POSITIONS(NUMBER)	0.00	0.	0.	0.	0.
13	GA AC LOADING & BYPASS APRON AREA(SY)	79.46	0.	0.	0.	0.
14	ITINERANT AIRCRAFT PARKING AREA(SY)	79.46	0.	1405.	2199.	2828.
15	GA BASED AIRCRAFT TIE-DOWN AREA(SY)	79.46	10168.	2695.	2865.	2695.
16	GA CONV HANGAR BLDG AND APRON AREA(SY)	79.46	0.	0.	0.	0.
17	GA #T# HANGAR BLDG & APRON AREA(SY)	79.46	0.	0.	0.	0.
18	GA PUBLIC VEHICULAR PARKING SPACE(NO.)	0.00	0.	0.	0.	0.
19	GA PUBLIC VEHICULAR PARKING AREA(SY)	0.00	88015.	16632.	22869.	29106.
20	AIRPORT MAINTENANCE APRON AREA(SY)	79.46	5934.	1245.	1830.	2089.
21	AIRPORT MAINTENANCE BUILDING(SF)	0.00	8026.	1685.	2475.	2826.
	TOTAL IN THOUSANDS OF DOLLARS		564.4	1620.5	403.4	1436.7

BOZEMAN

Bozeman is situated in a broad valley of the Rocky Mountain region of southwestern Montana. The Bridger Range lies north of the city. The Gallatin Forest is also located to the north, as well as south of Bozeman. The "Big Sky" resort is about 40-50 miles to the south and is expected to effect Bozeman and other airports. Interstate 90 provides good access to the east and west. Rail passenger service is provided by Amtrak three days a week between Livingston and Butte.

Gallatin Field is located 7 miles northwest of Bozeman just east of the town of Belgrade. Access to the airport is by U. S. 10. Interstate 90 passes just south of the town. A good interchange from Interstate 90 in the Belgrade area would greatly enhance the access to the airport from Bozeman. The existing and future air fleet will be largely composed of type 'B' and 'D & E' aircraft. However, in 1987, type 'A' aircraft will begin to use the facility.

Master plan Review: The MSASP published herein differs from the 1972 Bozeman Master plan in the projection of future aviation traffic. Whereas; the Bozeman Master plan predicts a slightly higher activity development items shown in the cost tables to follow are taken directly from that plan.

Facility Requirements

A new terminal complex will be developed west of the existing. This will necessitate the closure of runway 3/21 (it will be relocated without federal funds). New maintenance and general aviation buildings will allow extending the building restriction line. Accompanying aprons and ramps are planned.

Airside expansion will include a parallel runway and taxiway, lengthening runway (12/30) and relocation of runway 3/21.

These and more detailed development items are listed in the following pages.

To increase the IFR traffic capacity to meet the peak hour demands for 1977, it will be necessary to provide a remote feeder fix from which straight-in approaches can be made, and a suitable missed approach procedure must be established which will not conflict with the approach path. The establishment of an airport traffic control tower, with approach control capability, would allow the IFR capacity to keep pace with the peak hour demand, through the 1992 period.

Name: BOZEMAN

Site Number:. 12278

County: GALLATIN

District:. 9

SPECIAL CONSIDERATIONS

The approved Bozeman Master plan was completed September 1, 1972. This plan was reviewed and has been incorporated practically intact into the Montana State Airport system plan. The forecast indicators of the Master plan were not in the same terms (i.e. peak hour ops. vs. peak day ops.) as the MSASP, therefore, for the special case of Bozeman, the forecast indicators are shown in the terms of the Master plan. Because of a slight lag in actual activity since the Master plan was written, the values shown herein are two years later than the Bozeman Master plan.

Activity Forecasts

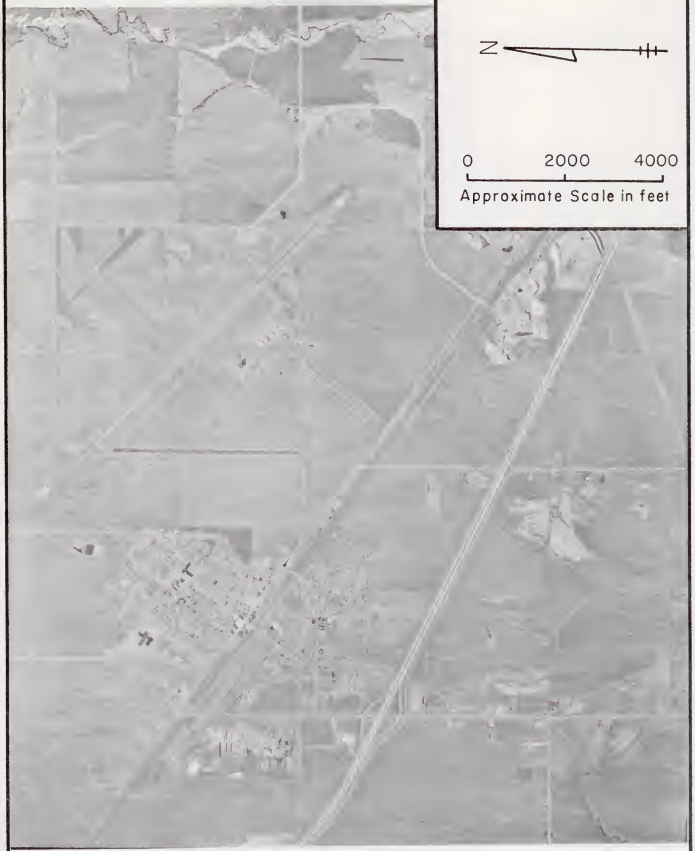
	1977	1982	1987	1992
1. Typical peak hour pax.	159*	395	556	606
2. Annual air carrier ops.	8,860	14,748	17,692	19,192
3. Total cargo (tons)	870.2	2,433.6	4,461.2	8,274.2
4. Air carrier ops./day	28*	41.4	49.8	54.4
5. Instr. ops./day	130*	186	256	353
6. Annual G. A. ops.	88,476	131,368	175,933	233,815
7. % G. A. itin.	33	32.5	32.5	30.0
8. G. A. Non-instr. ops./day	115*	165	220	293
9. Activity peak day ops./day	265*	391	524	699
10. % D & E population	89.18*	84.99	86.22	88.46
11. Pk. hr. activity (% pk. daily traffic)	19.80	18.74	19.09	19.62
12. Activity peak hour ops./hr.	52.0	73.3	100.0	137.1
13. % touch and go	44	43	44	45

* Interpolated for 1975 Master plan base year

DEVELOPMENT COST SUMMARY

PLAN PERIOD	PARTICIPATION	LAND SIDE	AIR SIDE	TOTAL
BEFORE 1977	FEDERAL	$ 954,000	$ 753,000	$ 1,707,000
	STATE/LOCAL	2,392,000	214,000	2,606,000
	TOTAL	3,346,000	967,000	4,313,000
1977	FEDERAL			
	STATE/LOCAL			
	TOTAL			
1982	FEDERAL		3,050,000	3,050,000
	STATE/LOCAL		785,000	785,000
	TOTAL		3,835,000	3,835,000
1987	FEDERAL	850,000		850,000
	STATE/LOCAL	896,000		896,000
	TOTAL	1,746,000		1,746,000
1992	FEDERAL			
	STATE/LOCAL			
	TOTAL			
TOTAL COSTS TO 1992	FEDERAL	1,804,000	3,803,000	5,607,000
	STATE/LOCAL	3,288,000	999,000	4,287,000
	TOTAL	5,092,000	4,802,000	9,894,000

BOZEMAN



MSASP AIRFIELD DEVELOPMENT COSTS IN THOUSANDS OF 1972 DOLLARS

BOZEMAN

		FED SHARE	TOTAL	FED GRANTS	STATE/LOCAL
	BEFORE 1977				
1	NEW G.A. AREA				
A	LAND PURCHASE	79.46	100.00	79.45	20.54
B	PAVE G.A. APRON	79.46	264.00	209.77	54.22
C	G.A. BUILDINGS	0.00	125.00	0.00	125.00
D	ACCESS ROADS	0.00	20.00	0.00	20.00
E	SOUTHWEST PARKING	0.00	139.79	0.00	139.79
2	NEW TERMINAL AREA DEVEL.				
A	TERMINAL BLDG	0.00	1802.00	0.00	1802.00
B	WATER TANK	79.46	143.10	113.70	29.39
C	SEWER LINE	0.00	78.44	0.00	78.44
D	UTILITY LINE	79.46	95.44	75.83	19.60
F	AIR CARRIER APRON	79.46	841.43	668.60	172.82
G	PARALLEL T/W&EAST END	79.46	600.00	476.75	123.24
H	TERMINAL ACCESS ROAD	79.46	78.97	62.74	16.22
I	SECURITY FENCE	79.46	25.00	19.86	5.13
J	AUTO PARKING(PRIVATELY)	0.00	0.00	0.00	0.00
	TOTAL ($000)		4313.23	1706.82	2606.48
	1977-1982				
3	MISCELLANEOUS REQUIRED				
A	EXTEND RUNWAY(1500')	79.46	442.22	351.38	90.83
B	MI. LIGHTS	82.00	109.57	89.84	19.72
C	MOVE ILS	79.46	59.55	47.31	12.23
D	EXTEND TAXIWAY(1500')	79.46	413.76	328.77	84.98
E	SECURITY FENCE	79.46	45.00	35.75	9.24
F	WIDEN TAXIWAY	79.46	336.55	267.42	69.12
G	PAVE RUNWAY SHOULDERS	79.46	223.52	177.60	45.91
H	FARM ROAD RELOCATION	79.46	308.17	244.87	63.29
I	RUNWAY OVERLAY	79.46	512.00	406.83	105.16
J	PARALLEL T/W WEST	79.46	594.00	471.99	122.00
K	TAXIWAY OVERLAY	79.46	458.00	363.92	94.07
L	PARALLEL RUNWAY	79.46	258.00	205.00	52.99
M	LAND PURCHASE	79.46	50.00	39.72	10.27
N	SECURITY FENCE	79.46	25.00	19.86	5.13
	TOTAL ($000)		3835.40	3050.41	785.06
	1987				
4	TERMINAL AREA ADDITIONS				
A	BUILDING	0.00	676.00	0.00	676.00
B	AIR CARRIER APRON	79.46	1070.00	850.22	219.77
	TOTAL ($000)		1746.01	850.23	895.78
	TOTAL PROJECT COSTS		9894.65	5607.46	4287.33

DEDICATED AIRSIDE AND LANDSIDE COMMERCIAL BUILDINGS

BUTTE

The city of Butte is in the Deer Lodge National Forest area of mountainous southwest Montana. The Continental Divide is just five miles east of the city. Interstate 90 provides access to the northwest and east, and Interstate 15 serves to points south and north to Helena. Amtrak serves Butte with passenger service 3 days a week. The Chicago-Seattle run serves Butte between Bozeman and Deer Lodge. A connector bus run between Helena and Butte is also made every three days.

The Silver Bow County Airport is located on the southeast section of town off U. S. 10. The majority of the air fleet will be composed of type 'B' and type 'D & E' aircraft. Type 'C' aircraft will operate in 1977. Since approaches are made over the city, the environment will be effected by the increase in activity. Expansion of the airport facilities will also be a major problem.

No additional runways will be necessary, in order to meet the VFR traffic demand up through the 1992 period. However, this airport is in serious trouble as far as IFR utilization and capacity are concerned. This is primarily because of high terrain on all sides of the airport. This terrain will keep the minima extremely high for any present type of approach aid. Therefore, no extension of the present system, in order to accommodate larger types of aircraft, is recommended, nor is the installation of a conventional ILS for this airport. Instead, it is recommended that a new airport site be selected to serve the Butte area. If possible, such a site should be selected with the idea of also meeting the future airline needs of Anaconda.

Facility Requirements

No expansion should be made of the existing site but rather a new airport location must be found.

The development items shown in the cost tables are as shown in the recent Butte site feasibility study.

No additional runways will be necessary, in order to meet the VFR traffic demand up through the 1992 period.

Considerable terminal area addition and development will be required in each five year interval as shown on the following pages.

Name: BUTTE

Site Number: 12286

County: SILVER BOW

District: 12

PEAK HOUR IFR AND VFR DEMAND FORECASTS

BUTTE, MONTANA	1977	1982	1987	1992
TOTAL PEAK HOUR VFR DEMAND	41.	46.	50.	55.
GA IFR PEAK HOUR DEMAND	3.	4.	6.	7.
AC AND GA IFR PH DEMAND	8.	10.	13.	14.

OPERATIONAL DATA

DEMAND FORECAST INDICATORS	1977	1982	1987	1992
1 AIR CARRIER PEAK HOUR PASSENGERS	193.0	232.0	260.0	294.0
2 TOTAL AIR CARRIER ANNUAL OPERATIONS	7226.0	8444.0	9900.0	12186.0
3 AIR CARRIER PEAK HOUR OPERATIONS	5.0	6.0	7.0	7.0
4 AIR CARRIER AVERAGE TURN-AROUND TIME	22.0	24.0	26.0	27.0
5 ANNUAL AIR CARGO(FR+ EX+ MAIL)	270.0	403.0	625.0	968.0
6 PERCENT OF AIRCRAFT TYPE=X=	0.0	0.0	0.0	0.0
7 PERCENT OF AIRCRAFT TYPE=X-1=	0.0	0.0	0.0	0.0
8 PERCENT OF AIRCRAFT TYPE=L=	34.0	36.0	38.0	42.0
9 PERCENT OF AIRCRAFT TYPE=M=	46.0	44.0	42.0	38.0
10 PERCENT OF AIRCRAFT TYPE=S AND T=	20.0	20.0	20.0	20.0
11 TOTAL GA ANNUAL OPERATIONS	22700.0	23600.0	24700.0	25400.0
12 GA PEAK HOUR OPERATIONS	36.0	40.0	43.0	48.0
13 PERCENT GA ITINERANT OPERATIONS	50.0	53.0	55.0	57.0
14 BASED AIRCRAFT UNDER 12500 LBS	37.0	42.0	47.0	53.0
15 BASED AIRCRAFT OVER 12500 LBS	1.0	1.0	1.0	1.0

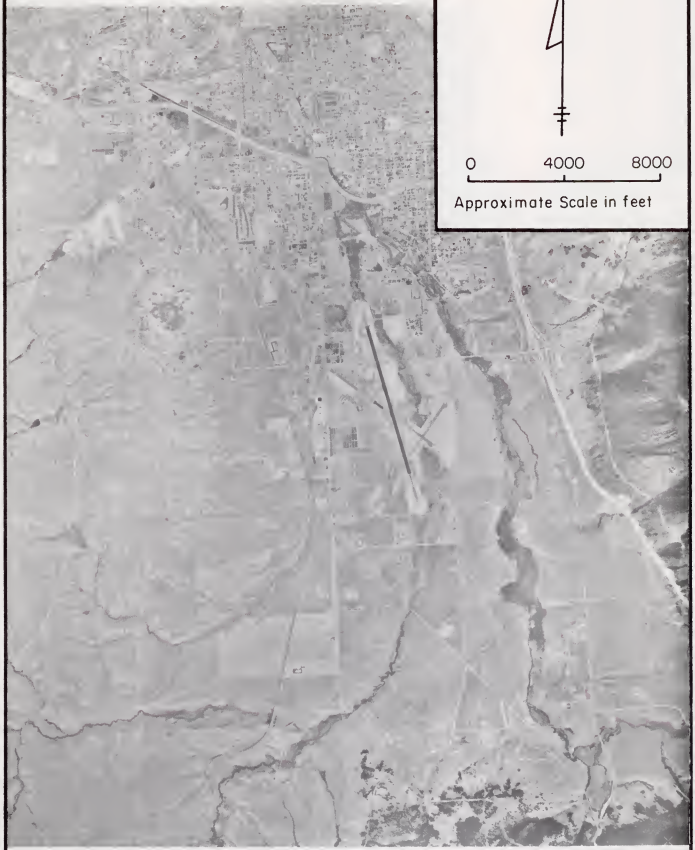
AIRCRAFT MIX AND CAPACITY FORECASTS

	1972	1977	1982	1987	1992
AIRCRAFT TYPE =A=	0	0	0	4	8
AIRCRAFT TYPE =B=	30	33	37	38	36
AIRCRAFT TYPE =C=	0	6	10	14	18
AIRCRAFT TYPE =D+E=	70	61	53	44	38
HOURLY CAPACITY VFR	72	74	76	72	65
HOURLY CAPACITY IFR	6	6	6	6	6
ANNUAL CAPACITY(000)	129	152	179	202	234

DEVELOPMENT COST SUMMARY

PLAN PERIOD	PARTICIPATION	LAND SIDE	AIR SIDE	TOTAL
BEFORE 1977	FEDERAL	$	$ 238,000	$ 238,000
	STATE/LOCAL		62,000	62,000
	TOTAL		300,000	300,000
1977	FEDERAL	86,000	4,336,000	4,422,000
	STATE/LOCAL	1,123,000	2,272,000	3,395,000
	TOTAL	1,209,000	6,608,000	7,817,000
1982	FEDERAL	5,000		5,000
	STATE/LOCAL	219,000		219,000
	TOTAL	224,000		224,000
1987	FEDERAL	5,000		5,000
	STATE/LOCAL	200,000		200,000
	TOTAL	205,000		205,000
1992	FEDERAL	62,000		62,000
	STATE/LOCAL	260,000		260,000
	TOTAL	322,000		322,000
TOTAL COSTS TO 1992	FEDERAL	158,000	4,574,000	4,732,000
	STATE/LOCAL	1,802,000	2,334,000	4,136,000
	TOTAL	1,960,000	6,908,000	8,868,000

BUTTE



MSASP AIRFIELD DEVELOPMENT COSTS IN THOUSANDS OF 1972 DOLLARS

BUTTE-NEW AIRPORT

		FED SHARE	TOTAL	FED GRANTS	STATE/LOCAL
	BEFORE 1977				
1	LAND ACQUISITION	79.46	300.00	238.37	61.62
	TOTAL ($000)		300.00	238.38	61.62
	1977				
1	MAIN RUNWAY				
	A SITE PREPARATION	79.46	150.00	119.18	30.81
	B PAVING	79.46	2178.16	1729.17	448.98
2	SECOND RUNWAY				
	A SITE PREPARATION	79.46	60.00	47.67	12.32
	B PAVING	79.46	603.00	479.14	123.85
3	MAIN PARALLEL TAXIWAY				
	A SITE PREPARATION	79.46	60.00	47.67	12.32
	B PAVING	79.46	980.00	762.81	197.18
4	SECOND PARALLEL TAXIWAY				
	A SITE PREPARATION	79.46	18.00	14.30	3.69
	B PAVING	79.46	204.00	162.09	41.90
5	TERMINAL AREA				
	A REPLACE EX. A, C+ APRON	79.46	252.00	200.23	51.76
	B PARKING	0.00	18.00	0.00	18.00
	C MAINT. BLDG	0.00	9.00	0.00	9.00
	D GA APRON	79.46	264.00	209.77	54.22
	E HANGARS	0.00	630.00	0.00	630.00
	F AC, TERMINAL	0.00	330.00	0.00	330.00
6	NAVAIDS				
	A ILS	100.00	350.00	350.00	0.00
	B TVOR	100.00	45.00	45.00	0.00
7	LANDING AIDS				
	A MIRL (TWO RWS)	79.46	140.80	111.87	28.92
	B VASI	79.46	4.00	3.17	0.82
	C REILS	79.46	8.00	6.35	1.64
8	ROAD RELOCATION	0.00	265.60	0.00	265.60
9	UTILITIES & SEWER	79.46	60.00	47.67	12.32
	TOTAL ($000)		6607.66	4336.28	2271.47

LANDSIDE

FEDERAL SHARE OF THE PROJECT COSTS

		FED SHARE	1977	1982	1987	1992
1	AIR CARRIER TERMINAL AREA(SF)	0.00	0.	0.	0.	0.
2	AIR CARRIER CARGO TERMINAL AREA(SF)	0.00	0.	0.	0.	0.
3	AIRLINE AC LOADING POSITIONS(NO.)	0.00	0.	0.	0.	0.
4	AC LOADING & BYPASS APRON AREAS(SY)	79.46	0.	0.	0.	0.
5	AC PUBLIC AUTO PARKING SPACES(NO.)	0.00	0.	0.	0.	0.
6	AC PUBLIC AUTO PARKING AREAS(SY)	0.00	0.	0.	0.	0.
7	AIRPORT MAINTENANCE APRON AREA (SY)	79.46	0.	0.	0.	0.
8	AIRPORT MAINTENANCE BUILDING(SF)	0.00	0.	0.	0.	0.
9	FIRE & EMERGENCY EQUIPMENT BUILDING(SF)	79.46	28605.	0.	0.	19070.
10	NUMBER OF FIRE AND RESCUE VEHICLES	82.00	35260.	0.	0.	35260.
11	GA TERMINAL BUILDING AREA(SF)	0.00	0.	0.	0.	0.
12	GA AIRCRAFT LOADING POSITIONS(NUMBER)	0.00	0.	0.	0.	0.
13	GA AC LOADING & BYPASS APRON AREA(SY)	79.46	0.	0.	0.	0.
14	ITINERANT AIRCRAFT PARKING AREA(SY)	79.46	6174.	2431.	1216.	2431.
15	GA BASED AIRCRAFT TIE-DOWN AREA(SY)	79.46	0.	956.	2086.	2503.
16	GA CONV HANGAR BLDG AND APRON AREA(SY)	79.46	0.	0.	0.	0.
17	GA #T# HANGAR BLDG & APRON AREA(SY)	79.46	11911.	1609.	1609.	1931.
18	GA PUBLIC VEHICULAR PARKING SPACE(NO.)	0.00	0.	0.	0.	0.
19	GA PUBLIC VEHICULAR PARKING AREA(SY)	0.00	0.	0.	0.	0.
20	AIRPORT MAINTENANCE APRON AREA(SY)	79.46	4280.	303.	365.	427.
21	AIRPORT MAINTENANCE BUILDING(SF)	0.00	0.	0.	0.	0.
	TOTAL IN THOUSANDS OF DOLLARS		86.2	5.3	5.3	61.6

PROJECT COST LESS FEDERAL GRANTS

		FED SHARE	1977	1982	1987	1992
1	AIR CARRIER TERMINAL AREA(SF)	0.00	943800.	187800.	176400.	214200.
2	AIR CARRIER CARGO TERMINAL AREA(SF)	0.00	1488.	733.	1223.	1890.
3	AIRLINE AC LOADING POSITIONS(NO.)	0.00	0.	0.	0.	0.
4	AC LOADING & BYPASS APRON AREAS(SY)	79.46	0.	0.	0.	0.
5	AC PUBLIC AUTO PARKING SPACES(NO.)	0.00	0.	0.	0.	0.
6	AC PUBLIC AUTO PARKING AREAS(SY)	0.00	80166.	18018.	12936.	15708.
7	AIRPORT MAINTENANCE APRON AREA (SY)	79.46	0.	0.	0.	0.
8	AIRPORT MAINTENANCE BUILDING(SF)	0.00	0.	0.	0.	0.
9	FIRE & EMERGENCY EQUIPMENT BUILDING(SF)	79.46	7394.	0.	0.	4929.
10	NUMBER OF FIRE AND RESCUE VEHICLES	82.00	7740.	0.	0.	7740.
11	GA TERMINAL BUILDING AREA(SF)	0.00	31500.	5500.	4125.	6875.
12	GA AIRCRAFT LOADING POSITIONS(NUMBER)	0.00	0.	0.	0.	0.
13	GA AC LOADING & BYPASS APRON AREA(SY)	79.46	0.	0.	0.	0.
14	ITINERANT AIRCRAFT PARKING AREA(SY)	79.46	1596.	628.	314.	628.
15	GA BASED AIRCRAFT TIE-DOWN AREA(SY)	79.46	0.	247.	539.	647.
16	GA CONV HANGAR BLDG AND APRON AREA(SY)	79.46	0.	0.	0.	0.
17	GA #T# HANGAR BLDG & APRON AREA(SY)	79.46	10575.	1429.	1429.	1715.
18	GA PUBLIC VEHICULAR PARKING SPACE(NO.)	0.00	0.	0.	0.	0.
19	GA PUBLIC VEHICULAR PARKING AREA(SY)	0.00	36222.	4158.	3119.	5198.
20	AIRPORT MAINTENANCE APRON AREA(SY)	79.46	1106.	78.	94.	110.
21	AIRPORT MAINTENANCE BUILDING(SF)	0.00	1496.	106.	128.	149.

GLASGOW

The city of Glasgow is situated in the plains region of northeast Montana. The Fort Peck Indian Reservation is 14 miles to the east and the Fort Peck Dam is 18 miles south. The Milk River passes just south of the city. U. S. 2 provides access to the west and east and State Route 24 to points south. Amtrak's"Empire Builder" provides daily service between Wolf Point and Malta.

Glasgow International is located 3/4 mile north of the city. Some 'C' aircraft type activity is currently present and will increase through 1987. In 1987 a small amount of 'B' type aircraft activity is expected, and will increase in 1992. No environmental problems can be foreseen.

No additional runways will be required to meet the forecasted peak hour VFR demands for this airport. An ILS should be installed on either runway 12 or runway 30 in order to lower the weather minima. There are no serious terrain obstructions in this area. The present Glasgow NDB could be moved to the outer marker site in order to establish a holding fix from which successive straight in approaches can be made.

Facility Requirements

No additional runways will be required to meet the forecasted peak hour VFR demands for this airport. Major terminal costs include purchase of fire and rescue vehicles, some terminal space in 1982, and general aviation area development throughout the period. Runway (12-30) should be reconstructed. Before the very costly runway reconstruction is begun, a detailed master plan and/or feasibility study should be completed.

An ILS should be installed on either runway 12 or runway 30 in order to lower the weather minima which presently are 500/1. There are no serious terrain obstructions in this area. The present Glasgow NDB could be moved to the outer marker site in order to establish a holding fix from which successive straight in approaches can be made.

Name: GLASGOW

Site Number: 12375

County: VALLEY

District: 1

PEAK HOUR IFR AND VFR DEMAND FORECASTS

GLASGOW, MONTANA	1977	1982	1987	1992
TOTAL PEAK HOUR VFR DEMAND	44.	52.	58.	64.
GA IFR PEAK HOUR DEMAND	4.	6.	7.	9.
AC AND GA IFR PH DEMAND	6.	8.	9.	11.

OPERATIONAL DATA

DEMAND FORECAST INDICATORS

		1977	1982	1987	1992
1	AIR CARRIER PEAK HOUR PASSENGERS	6.0	9.0	14.0	17.0
2	TOTAL AIR CARRIER ANNUAL OPERATIONS	750.0	658.0	600.0	614.0
3	AIR CARRIER PEAK HOUR OPERATIONS	2.0	2.0	2.0	2.0
4	AIR CARRIER AVERAGE TURN-AROUND TIME	20.0	20.0	20.0	20.0
5	ANNUAL AIR CARGO(FR* EX* MAIL)	28.0	69.0	148.0	292.0
6	PERCENT OF AIRCRAFT TYPE*X*	0.0	0.0	0.0	0.0
7	PERCENT OF AIRCRAFT TYPE*X-1*	0.0	0.0	0.0	0.0
8	PERCENT OF AIRCRAFT TYPE*L*	0.0	0.0	0.0	0.0
9	PERCENT OF AIRCRAFT TYPE*M*	0.0	3.0	7.0	10.0
10	PERCENT OF AIRCRAFT TYPE*S AND T*	100.0	97.0	93.0	90.0
11	TOTAL GA ANNUAL OPERATIONS	26330.0	31500.0	35000.0	38000.0
12	GA PEAK HOUR OPERATIONS	42.0	50.0	56.0	62.0
13	PERCENT GA ITINERANT OPERATIONS	30.0	40.0	45.0	50.0
14	BASED AIRCRAFT UNDER 12500 LBS	36.0	40.0	44.0	47.0
15	BASED AIRCRAFT OVER 12500 LBS	1.0	1.0	1.0	1.0

AIRCRAFT MIX AND CAPACITY FORECASTS

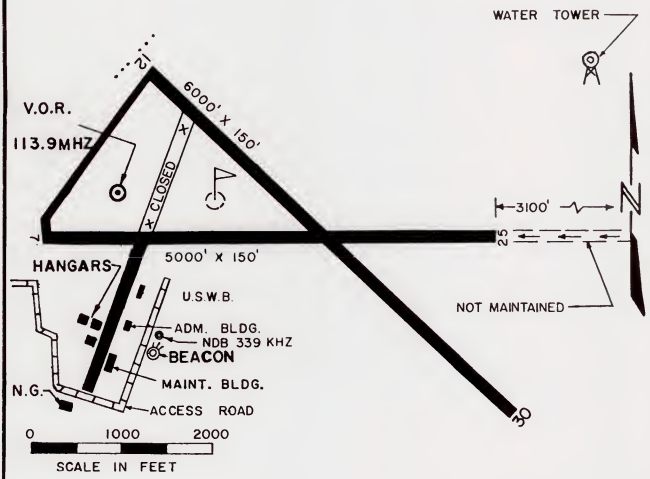
	1972	1977	1982	1987	1992
AIRCRAFT TYPE *A*	0	0	0	0	0
AIRCRAFT TYPE *B*	0	0	0	1	4
AIRCRAFT TYPE *C*	5	10	15	18	18
AIRCRAFT TYPE *D+E*	95	90	85	81	78
HOURLY CAPACITY VFR	82	90	99	98	97
HOURLY CAPACITY IFR	53	53	52	52	52
ANNUAL CAPACITY(000)	114	125	146	151	160

DEVELOPMENT COST SUMMARY

PLAN PERIOD	PARTICIPATION	LAND SIDE	AIR SIDE	TOTAL
BEFORE 1977	FEDERAL			
	STATE/LOCAL			
	TOTAL			
1977	FEDERAL	$ 63,000	$ 350,000	$ 413,000
	STATE/LOCAL	109,000		109,000
	TOTAL	172,000	350,000	522,000
1982	FEDERAL	8,000	1,204,000	1,212,000
	STATE/LOCAL	39,000	311,000	350,000
	TOTAL	47,000	1,515,000	1,562,000
1987	FEDERAL	8,000		8,000
	STATE/LOCAL	52,000		52,000
	TOTAL	60,000		60,000
1992	FEDERAL	6,000		6,000
	STATE/LOCAL	38,000		38,000
	TOTAL	44,000		44,000
TOTAL COSTS TO 1992	FEDERAL	85,000	1,554,000	1,639,000
	STATE/LOCAL	238,000	311,000	549,000
	TOTAL	323,000	1,865,000	2,188,000

GLASGOW INTL.

AIRPORT LAYOUT



MSASP AIRFIELD DEVELOPMENT COSTS IN THOUSANDS OF 1972 DOLLARS

GLASGOW

AIRSIDE

	FED SHARE	TOTAL	FED GRANTS	STATE/LOCAL
1977				
1 ADD ILS	100.00	350.00	350.00	0.00
TOTAL ($000)		350.00	350.00	0.00
1982				
2 RECONSTRUCT RW(12/30)	79.46	1500.00	1191.89	308.10
3 VASI	79.46	15.00	11.91	3.08
TOTAL ($000)		1515.01	1203.82	311.19
TOTAL PROJECT COSTS		1865.01	1553.83	311.19

LANDSIDE

FEDERAL SHARE OF THE PROJECT COSTS

	FED SHARE	1977	1982	1987	1992
1 AIR CARRIER TERMINAL AREA(SF)	0.00	0.	0.	0.	0.
2 AIR CARRIER CARGO TERMINAL AREA(SF)	0.00	0.	0.	0.	0.
3 AIRLINE AC LOADING POSITIONS(NO.)	0.00	0.	0.	0.	0.
4 AC LOADING & BYPASS APRON AREAS(SY)	79.46	0.	0.	0.	0.
5 AC PUBLIC AUTO PARKING SPACES(NO.)	0.00	0.	0.	0.	0.
6 AC PUBLIC AUTO PARKING AREAS(SY)	0.00	0.	0.	0.	0.
7 AIRPORT MAINTENANCE APRON AREA (SY)	79.46	3664.	1089.	738.	647.
8 AIRPORT MAINTENANCE BUILDING(SF)	0.00	0.	0.	0.	0.
9 FIRE & EMERGENCY EQUIPMENT BUILDING(SF)	79.46	9535.	0.	0.	0.
10 NUMBER OF FIRE AND RESCUE VEHICLES	82.00	35260.	0.	0.	0.
11 GA TERMINAL BUILDING AREA(SF)	0.00	0.	0.	0.	0.
12 GA AIRCRAFT LOADING POSITIONS(NUMBER)	0.00	0.	0.	0.	0.
13 GA AC LOADING & BYPASS APRON AREA(SY)	79.46	0.	0.	1001.	1621.
14 ITINERANT AIRCRAFT PARKING AREA(SY)	79.46	2527.	4863.	3647.	2431.
15 GA BASED AIRCRAFT TIE-DOWN AREA(SY)	79.46	8465.	1669.	1669.	1251.
16 GA CONV HANGAR BLDG AND APRON AREA(SY)	79.46	0.	0.	0.	0.
17 GA *T* HANGAR BLDG & APRON AREA(SY)	79.46	0.	0.	0.	0.
18 GA PUBLIC VEHICULAR PARKING SPACE(NO.)	0.00	0.	0.	0.	0.
19 GA PUBLIC VEHICULAR PARKING AREA(SY)	0.00	0.	0.	0.	0.
20 AIRPORT MAINTENANCE APRON AREA(SY)	79.46	3873.	726.	492.	431.
21 AIRPORT MAINTENANCE BUILDING(SF)	0.00	0.	0.	0.	0.
TOTAL IN THOUSANDS OF DOLLARS		63.3	8.4	7.6	6.4

PROJECT COST LESS FEDERAL GRANTS

	FED SHARE	1977	1982	1987	1992
1 AIR CARRIER TERMINAL AREA(SF)	0.00	0.	17100.	34500.	20700.
2 AIR CARRIER CARGO TERMINAL AREA(SF)	0.00	154.	226.	435.	794.
3 AIRLINE AC LOADING POSITIONS(NO.)	0.00	0.	0.	0.	0.
4 AC LOADING & BYPASS APRON AREAS(SY)	79.46	0.	0.	0.	0.
5 AC PUBLIC AUTO PARKING SPACES(NO.)	0.00	0.	0.	0.	0.
6 AC PUBLIC AUTO PARKING AREAS(SY)	0.00	0.	0.	0.	0.
7 AIRPORT MAINTENANCE APRON AREA (SY)	79.46	947.	281.	190.	167.
8 AIRPORT MAINTENANCE BUILDING(SF)	0.00	0.	0.	0.	0.
9 FIRE & EMERGENCY EQUIPMENT BUILDING(SF)	79.46	2464.	0.	0.	0.
10 NUMBER OF FIRE AND RESCUE VEHICLES	82.00	7740.	0.	0.	0.
11 GA TERMINAL BUILDING AREA(SF)	0.00	49750.	11000.	8250.	8250.
12 GA AIRCRAFT LOADING POSITIONS(NUMBER)	0.00	0.	0.	0.	0.
13 GA AC LOADING & BYPASS APRON AREA(SY)	79.46	0.	0.	258.	419.
14 ITINERANT AIRCRAFT PARKING AREA(SY)	79.46	653.	1257.	942.	628.
15 GA BASED AIRCRAFT TIE-DOWN AREA(SY)	79.46	2188.	431.	431.	323.
16 GA CONV HANGAR BLDG AND APRON AREA(SY)	79.46	0.	0.	0.	0.
17 GA *T* HANGAR BLDG & APRON AREA(SY)	79.46	0.	0.	0.	0.
18 GA PUBLIC VEHICULAR PARKING SPACE(NO.)	0.00	0.	0.	0.	0.
19 GA PUBLIC VEHICULAR PARKING AREA(SY)	0.00	42759.	8316.	6237.	6237.
20 AIRPORT MAINTENANCE APRON AREA(SY)	79.46	1001.	187.	127.	111.
21 AIRPORT MAINTENANCE BUILDING(SF)	0.00	1354.	254.	172.	151.
TOTAL IN THOUSANDS OF DOLLARS		109.0	39.1	51.6	37.8

GLENDIVE

The city of Glendive is situated in east Montana in the Yellowstone River Valley. Interstate 94 provides access east into North Dakota. The Interstate 95 Southwest to Miles City is partially complete. The total system will be finished by 1990. State Route 16 gives access north to Sidney and State Route 200S serves the northwest area. Rail transportation is provided between Dickinson, North Dakota and Miles City by Amtrak.

The Dawson Community Airport is located 4.5 miles northwest of Glendive. The current air fleet is composed of type 'D & E' and 'C' aircraft. There should be few environmental problems. The present facilities will be able to accommodate the forcasted peak hour VFR and IFR traffic demands.

Facility Requirements

The existing runway system will accommodate the projected peak hour VFR/IFR traffic demands and no runway extension will be required through the forecast period. The greatest expense should be paving and widening runway 2/20. This should be accompanied by taxiway paving.

Name: GLENDIVE

Site Number:. 12378.1

County: DAWSON

District:. 2

PEAK HOUR IFR AND VFR DEMAND FORECASTS

GLENDIVE, MONTANA	1977	1982	1987	1992
TOTAL PEAK HOUR VFR DEMAND	26.	27.	27.	28.
GA IFR PEAK HOUR DEMAND	2.	3.	3.	4.
AC AND GA IFR PH DEMAND	4.	5.	5.	6.

OPERATIONAL DATA

DEMAND FORECAST INDICATORS

	1977	1982	1987	1992
1 AIR CARRIER PEAK HOUR PASSENGERS	5.0	7.0	8.0	10.0
2 TOTAL AIR CARRIER ANNUAL OPERATIONS	950.0	970.0	980.0	990.0
3 AIR CARRIER PEAK HOUR OPERATIONS	2.0	2.0	2.0	2.0
4 AIR CARRIER AVERAGE TURN-AROUND TIME	10.0	12.0	14.0	16.0
5 ANNUAL AIR CARGO(FR+ EX+ MAIL)	34.0	64.0	120.0	250.0
6 PERCENT OF AIRCRAFT TYPE*X*	0.0	0.0	0.0	0.0
7 PERCENT OF AIRCRAFT TYPE*X-1*	0.0	0.0	0.0	0.0
8 PERCENT OF AIRCRAFT TYPE*L*	0.0	0.0	0.0	0.0
9 PERCENT OF AIRCRAFT TYPE*M*	0.0	3.0	7.0	10.0
10 PERCENT OF AIRCRAFT TYPE*S AND T*	100.0	97.0	93.0	90.0
11 TOTAL GA ANNUAL OPERATIONS	12900.0	12700.0	12900.0	13300.0
12 GA PEAK HOUR OPERATIONS	24.0	25.0	25.0	26.0
13 PERCENT GA ITINERANT OPERATIONS	50.0	50.0	50.0	50.0
14 BASED AIRCRAFT UNDER 12500 LBS	25.0	27.0	29.0	30.0
15 BASED AIRCRAFT OVER 12500 LBS	0.0	0.0	0.0	0.0

AIRCRAFT MIX AND CAPACITY FORECASTS

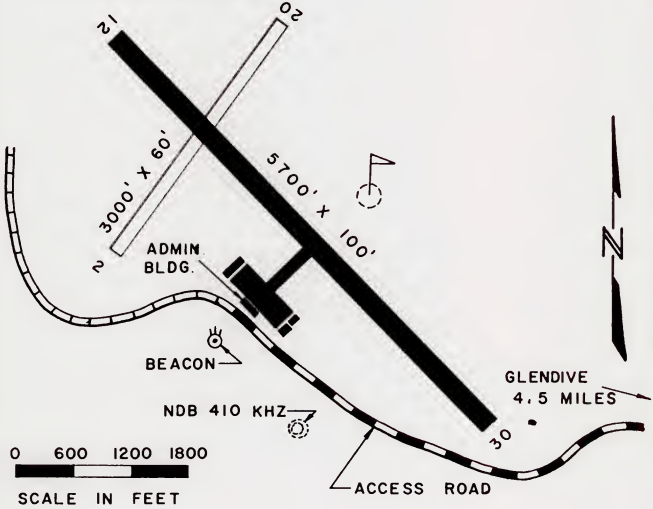
	1972	1977	1982	1987	1992
AIRCRAFT TYPE *A*	0	0	0	0	0
AIRCRAFT TYPE *B*	0	0	0	4	12
AIRCRAFT TYPE *C*	10	18	24	27	26
AIRCRAFT TYPE *D+E*	90	82	76	69	62
HOURLY CAPACITY VFR	72	85	99	97	96
HOURLY CAPACITY IFR	0	52	52	52	52
ANNUAL CAPACITY(000)	100	130	163	176	194

DEVELOPMENT COST SUMMARY

PLAN PERIOD	PARTICIPATION	LAND SIDE	AIR SIDE	TOTAL
BEFORE 1977	FEDERAL			
	STATE/LOCAL			
	TOTAL			
1977	FEDERAL	$ 58,000	$ 637,000	$ 695,000
	STATE/LOCAL	69,000	153,000	222,000
	TOTAL	127,000	790,000	917,000
1982	FEDERAL	1,000		1,000
	STATE/LOCAL	4,000		4,000
	TOTAL	5,000		5,000
1987	FEDERAL	1,000		1,000
	STATE/LOCAL	2,000		2,000
	TOTAL	3,000		3,000
1992	FEDERAL	1,000		1,000
	STATE/LOCAL	16,000		16,000
	TOTAL	17,000		17,000
TOTAL COSTS TO 1992	FEDERAL	61,000	637,000	698,000
	STATE/LOCAL	91,000	153,000	244,000
	TOTAL	152,000	790,000	942,000

GLENDIVE

AIRPORT LAYOUT



MSASP AIRFIELD DEVELOPMENT COSTS IN THOUSANDS OF 1972 DOLLARS

GLENDIVE

AIR SIDE

		FED SHARE	TOTAL	FED GRANTS	STATE/LOCAL
	1977				
1	WIDEN R/W(2-20)				
	A FARTHWORK	79.46	3.00	2.38	0.61
2	PAVE R/W(2-20)	79.46	450.00	357.57	92.43
3	PAVE TAXIWAY	79.46	250.00	198.64	51.35
4	ADD MIRL RW(2-20)	79.46	27.00	21.45	5.54
5	VASI	79.46	15.00	11.91	3.08
6	VOR	100.00	45.00	45.00	0.00
	TOTAL ($000)		790.02	637.00	153.05
	TOTAL PROJECT COSTS		790.02	637.00	153.05

LAND SIDE

FEDERAL SHARE OF THE PROJECT COSTS

	FED SHARE	1977	1982	1987	1992
1 AIR CARRIER TERMINAL AREA(SF)	0.00	0.	0.	0.	0.
2 AIR CARRIER CARGO TERMINAL AREA(SF)	0.00	0.	0.	0.	0.
3 AIRLINE AC LOADING POSITIONS(NO.)	0.00	0.	0.	0.	0.
4 AC LOADING & BYPASS APRON AREAS(SY)	79.46	0.	0.	0.	0.
5 AC PUBLIC AUTO PARKING SPACES(NO.)	0.00	0.	0.	0.	0.
6 AC PUBLIC AUTO PARKING AREAS(SY)	0.00	0.	0.	0.	0.
7 AIRPORT MAINTENANCE APRON AREA (SY)	79.46	0.	0.	0.	0.
8 AIRPORT MAINTENANCE BUILDING(SF)	0.00	0.	0.	0.	0.
9 FIRE & EMERGENCY EQUIPMENT BUILDING(SF)	79.46	9535.	0.	0.	0.
10 NUMBER OF FIRE AND RESCUE VEHICLES	82.00	35260.	0.	0.	0.
11 GA TERMINAL BUILDING AREA(SF)	0.00	0.	0.	0.	0.
12 GA AIRCRAFT LOADING POSITIONS(NUMBER)	0.00	0.	0.	0.	0.
13 GA AC LOADING & BYPASS APRON AREA(SY)	79.46	4844.	0.	0.	0.
14 ITINERANT AIRCRAFT PARKING AREA(SY)	79.46	0.	0.	0.	0.
15 GA BASED AIRCRAFT TIE-DOWN AREA(SY)	79.46	5282.	834.	834.	417.
16 GA CONV HANGAR BLDG AND APRON AREA(SY)	79.46	1192.	324.	324.	162.
17 GA *T* HANGAR BLDG & APRON AREA(SY)	79.46	0.	0.	0.	0.
18 GA PUBLIC VEHICULAR PARKING SPACE(NO.)	0.00	0.	0.	0.	0.
19 GA PUBLIC VEHICULAR PARKING AREA(SY)	0.00	0.	0.	0.	0.
20 AIRPORT MAINTENANCE APRON AREA(SY)	79.46	1387.	31.	30.	59.
21 AIRPORT MAINTENANCE BUILDING(SF)	0.00	0.	0.	0.	0.
TOTAL IN THOUSANDS OF DOLLARS		57.5	1.2	1.2	0.6

PROJECT COST LESS FEDERAL GRANTS

	FED SHARE	1977	1982	1987	1992
1 AIR CARRIER TERMINAL AREA(SF)	0.00	0.	0.	0.	12000.
2 AIR CARRIER CARGO TERMINAL AREA(SF)	0.00	187.	165.	309.	716.
3 AIRLINE AC LOADING POSITIONS(NO.)	0.00	0.	0.	0.	0.
4 AC LOADING & BYPASS APRON AREAS(SY)	79.46	0.	0.	0.	0.
5 AC PUBLIC AUTO PARKING SPACES(NO.)	0.00	0.	0.	0.	0.
6 AC PUBLIC AUTO PARKING AREAS(SY)	0.00	510.	924.	462.	924.
7 AIRPORT MAINTENANCE APRON AREA (SY)	79.46	0.	0.	0.	0.
8 AIRPORT MAINTENANCE BUILDING(SF)	0.00	0.	0.	0.	0.
9 FIRE & EMERGENCY EQUIPMENT BUILDING(SF)	79.46	2446.	0.	0.	0.
10 NUMBER OF FIRE AND RESCUE VEHICLES	82.00	7740.	0.	0.	0.
11 GA TERMINAL BUILDING AREA(SF)	0.00	28000.	1125.	0.	1125.
12 GA AIRCRAFT LOADING POSITIONS(NUMBER)	0.00	0.	0.	0.	0.
13 GA AC LOADING & BYPASS APRON AREA(SY)	79.46	1252.	0.	0.	0.
14 ITINERANT AIRCRAFT PARKING AREA(SY)	79.46	0.	0.	0.	0.
15 GA BASED AIRCRAFT TIE-DOWN AREA(SY)	79.46	1365.	215.	215.	107.
16 GA CONV HANGAR BLDG AND APRON AREA(SY)	79.46	1808.	492.	492.	246.
17 GA *T* HANGAR BLDG & APRON AREA(SY)	79.46	0.	0.	0.	0.
18 GA PUBLIC VEHICULAR PARKING SPACE(NO.)	0.00	0.	0.	0.	0.
19 GA PUBLIC VEHICULAR PARKING AREA(SY)	0.00	24918.	1040.	0.	1040.
20 AIRPORT MAINTENANCE APRON AREA(SY)	79.46	358.	8.	7.	15.
21 AIRPORT MAINTENANCE BUILDING(SF)	0.00	672.	11.	11.	21.
TOTAL IN THOUSANDS OF DOLLARS		69.3	4.0	1.5	16.2

GREAT FALLS

Great Falls is situated in the northwest plains area of Montana on the Missouri River, 50 miles east of the Rockies. Interstate 15 serves the city from the north and southwest. State Route 87 gives access to the northeast and State Route 87 and 89 serve the southeast and east.

The airport, Great Falls International, is located just east of the city off Interstate 15. A small amount of 'A' type aircraft activity now exists. This activity will increase at a slow uniform rate throughout the forecast period. No environmental problems will occur if operations are from the south. Operations from the north will present a problem to the city.

Facility Requirements

The forecasted peak hour VFR demand for 1977 exceeds the capacity of a single runway. However, diverging runways available under certain windy conditions, should be able to accommodate peak hour loads up to 1982 at which time a parallel general aviation runway would be necessary in order to handle the forecasted peak hour VFR traffic.

Other airside items include a parallel taxiway and an overlay and extension for runway 16-43.

Landside items include considerable terminal building space, aircraft parking and holding aprons.

The imporvements summarized in the cost tables are taken from the current Great Falls Master Plan assuming certain adaptations. The master plan identified a "possible future NE/SW runway" drawn parallel to runway 3-21 on the development plan. The MSASP adopts the employment of that runway as explained above.

Items presently under construction are shown as requirements, while items recently completed are not.

Name: GREAT FALLS

Site Number: 12381

County: CASCADE

District: 5

PEAK HOUR IFR AND VFR DEMAND FORECASTS

GREAT FALLS, MONTANA	1977	1982	1987	1992
TOTAL PEAK HOUR VFR DEMAND	104.	127.	149.	180.
GA IFR PEAK HOUR DEMAND	8.	13.	18.	25.
AC AND GA IFR PH DEMAND	18.	25.	32.	40.

OPERATIONAL DATA

DEMAND FORECAST INDICATORS	1977	1982	1987	1992
1 AIR CARRIER PEAK HOUR PASSENGERS	364.0	502.0	650.0	798.0
2 TOTAL AIR CARRIER ANNUAL OPERATIONS	16572.0	20294.0	23762.0	24138.0
3 AIR CARRIER PEAK HOUR OPERATIONS	10.0	12.0	14.0	15.0
4 AIR CARRIER AVERAGE TURN-AROUND TIME	34.0	36.0	38.0	39.0
5 ANNUAL AIR CARGO(FR* EX* MAIL)	1512.0	2201.0	3115.0	4574.0
6 PERCENT OF AIRCRAFT TYPE*X*	0.0	0.0	0.0	0.0
7 PERCENT OF AIRCRAFT TYPE*X-1*	0.0	2.0	8.0	15.0
8 PERCENT OF AIRCRAFT TYPE*L*	40.0	47.0	46.0	43.0
9 PERCENT OF AIRCRAFT TYPE*M*	48.0	42.0	35.0	29.0
10 PERCENT OF AIRCRAFT TYPE*S AND T*	13.0	12.0	12.0	11.0
11 TOTAL GA ANNUAL OPERATIONS	93600.0	112260.0	132680.0	164210.0
12 GA PEAK HOUR OPERATIONS	94.0	115.0	135.0	165.0
13 PERCENT GA ITINERANT OPERATIONS	50.0	53.0	56.0	57.0
14 BASED AIRCRAFT UNDER 12500 LBS	172.0	196.0	230.0	269.0
15 BASED AIRCRAFT OVER 12500 LBS	4.0	4.0	5.0	6.0

AIRCRAFT MIX AND CAPACITY FORECASTS

	1972	1977	1982	1987	1992
AIRCRAFT TYPE *A*	2	3	4	5	6
AIRCRAFT TYPE *B*	8	9	10	11	12
AIRCRAFT TYPE *C*	4	8	12	16	19
AIRCRAFT TYPE *D+E*	86	80	74	68	63
HOURLY CAPACITY VFR	96	104	112	112	112
HOURLY CAPACITY IFR	52	60	68	68	68
ANNUAL CAPACITY(000)	140	163	189	206	222

DEVELOPMENT COST SUMMARY

PLAN PERIOD	PARTICIPATION	LAND SIDE	AIR SIDE	TOTAL
BEFORE 1977	FEDERAL			
	STATE/LOCAL			
	TOTAL			
1977	FEDERAL	$ 3,304,000	$ 2,206,000	$ 5,510,000
	STATE/LOCAL	3,801,000	509,000	4,310,000
	TOTAL	7,105,000	2,715,000	9,820,000
1982	FEDERAL		362,000	362,000
	STATE/LOCAL		93,000	93,000
	TOTAL		455,000	455,000
1987	FEDERAL			
	STATE/LOCAL			
	TOTAL			
1992	FEDERAL			
	STATE/LOCAL			
	TOTAL			
TOTAL COSTS TO 1992	FEDERAL	3,304,000	2,568,000	5,872,000
	STATE/LOCAL	3,801,000	602,000	4,403,000
	TOTAL	7,105,000	3,170,000	10,275,000

GREAT FALLS

MSASP AIRFIELD DEVELOPMENT COSTS IN THOUSANDS OF 1972 DOLLARS

GREAT FALLS

		FED SHARE	TOTAL	FED GRANTS	STATE/LOCAL
	1977				
1	EXTEND RW (16-34)	79.46	863.60	686.21	177.38
2	STRENGTHEN RW(16-34)	79.46	1610.70	1279.86	330.83
3	PARA. T W.. HOLDING AP.	79.46	1899.80	1509.58	390.21
4	ILS & ALS	100.00	240.00	240.00	0.00
5	TERMINAL APRON	79.46	2023.98	1608.25	415.72
6	TERMINAL BLDG.	0.00	2807.19	0.00	2807.19
7	AUTO PARKING	0.00	138.55	0.00	138.55
8	AIRCRAFT PARKING	79.46	235.23	186.91	48.31
	TOTAL ($000)		9819.08	5510.86	4308.26
	1982				
9	PARALLEL GA. RUNWAY				
	A EARTHWORK	79.46	39.00	30.98	8.01
	B SITE PREPARATION	79.46	20.00	15.89	4.10
	C PAVING	79.46	360.00	286.05	73.94
	A MIRL	79.46	32.00	25.42	6.57
	E DRAINAGE	79.46	4.00	3.17	0.82
	TOTAL ($000)		455.02	361.56	93.48
	TOTAL PROJECT COSTS		10274.11	5872.43	4401.74

COMBINED AIRSIDE AND LANDSIDE

HAVRE

Havre is in northern Montana, 12 miles east of the Fresno Reservoir and 20 miles north of the Rocky Boy Indian Reservation. U.S. Route 2 provides access to the east and west and U.S. Route 87 serves the southwest area. Amtrak provides passenger service daily between Malta and Shelby.

The airport is 2 miles west of Havre off U.S. Route 2. Existing and future aircraft mix are of type "C" and "D&E". The increase in activity could cause noise problems over the city since operations occur from the east. Restrictive zoning should be considered to insure community developments compatible with the airport.

Facility Requirements

No additional runways will be required; however, the present taxiway system should be expanded. Present minima are 500/1; however it is not recommended that NAVAIDS be added. Fire and rescue equipment should be purchased prior to 1977 and public parking spaces should be constructed. The crosswind runway 3/21 is deteriorated to the point that total reconstruction is necessary.

A master plan is underway, but no results have been published.

Name: HAVRE

Site Number:. 12399

County: HILL

District: 4

PEAK HOUR IFR AND VFR DEMAND FORECASTS

HAVRE, MONTANA	1977	1982	1987	1992
TOTAL PEAK HOUR VFR DEMAND	30.	34.	38.	42.
GA IFR PEAK HOUR DEMAND	3.	4.	5.	6.
AC AND GA IFR PH DEMAND	5.	6.	7.	8.

OPERATIONAL DATA

DEMAND FORECAST INDICATORS

	1977	1982	1987	1992
1 AIR CARRIER PEAK HOUR PASSENGERS	2.0	4.0	7.0	10.0
2 TOTAL AIR CARRIER ANNUAL OPERATIONS	800.0	800.0	860.0	900.0
3 AIR CARRIER PEAK HOUR OPERATIONS	2.0	2.0	2.0	2.0
4 AIR CARRIER AVERAGE TURN-AROUND TIME	10.0	12.0	14.0	16.0
5 ANNUAL AIR CARGO(FR* EX* MAIL)	40.0	62.0	96.0	173.0
6 PERCENT OF AIRCRAFT TYPE*X*	0.0	0.0	0.0	0.0
7 PERCENT OF AIRCRAFT TYPE*X-1*	0.0	0.0	0.0	0.0
8 PERCENT OF AIRCRAFT TYPE*L*	0.0	0.0	0.0	0.0
9 PERCENT OF AIRCRAFT TYPE*M*	0.0	3.0	4.0	5.0
10 PERCENT OF AIRCRAFT TYPE*S AND T*	100.0	97.0	96.0	95.0
11 TOTAL GA ANNUAL OPERATIONS	17200.0	19200.0	21600.0	24200.0
12 GA PEAK HOUR OPERATIONS	28.0	32.0	36.0	40.0
13 PERCENT GA ITINERANT OPERATIONS	50.0	50.0	50.0	50.0
14 BASED AIRCRAFT UNDER 12500 LBS	32.0	36.0	39.0	42.0
15 BASED AIRCRAFT OVER 12500 LBS	1.0	1.0	1.0	1.0

AIRCRAFT MIX AND CAPACITY FORECASTS

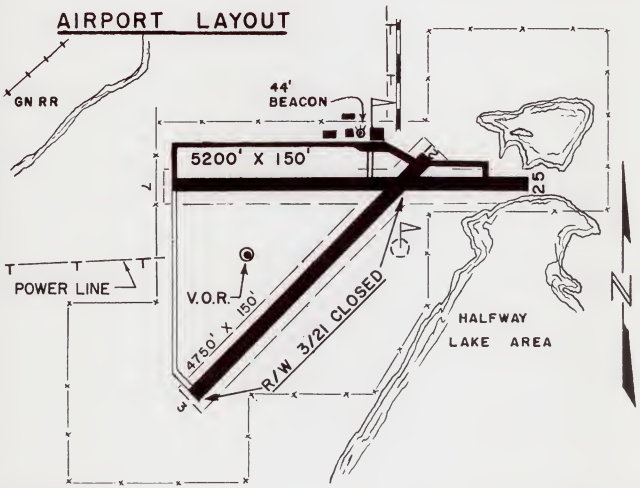
	1972	1977	1982	1987	1992
AIRCRAFT TYPE *A*	0	0	0	0	0
AIRCRAFT TYPE *B*	0	0	0	6	13
AIRCRAFT TYPE *C*	11	20	28	30	27
AIRCRAFT TYPE *D-F*	89	80	72	64	60
HOURLY CAPACITY VFR	87	92	99	95	92
HOURLY CAPACITY IFR	53	52	52	52	52
ANNUAL CAPACITY(000)	122	144	172	186	192

DEVELOPMENT COST SUMMARY

PLAN PERIOD	PARTICIPATION	LAND SIDE	AIR SIDE	TOTAL
BEFORE 1977	FEDERAL	$	$ 1,308,000	$ 1,308,000
	STATE/LOCAL		338,000	338,000
	TOTAL		1,646,000	1,646,000
1977	FEDERAL	65,000		65,000
	STATE/LOCAL	76,000		76,000
	TOTAL	141,000		141,000
1982	FEDERAL	4,000		4,000
	STATE/LOCAL	11,000		11,000
	TOTAL	15,000		15,000
1987	FEDERAL	3,000		3,000
	STATE/LOCAL	11,000		11,000
	TOTAL	14,000		14,000
1992	FEDERAL	3,000		3,000
	STATE/LOCAL	12,000		12,000
	TOTAL	15,000		15,000
TOTAL COSTS TO 1992	FEDERAL	75,000	1,308,000	1,383,000
	STATE/LOCAL	110,000	338,000	448,000
	TOTAL	185,000	1,646,000	1,831,000

HAVRE

AIRPORT LAYOUT



MSASP AIRFIELD DEVELOPMENT COSTS IN THOUSANDS OF 1972 DOLLARS

HAVRE

		FED SHARE	TOTAL	FED GRANTS	STATE/LOCAL
	BEFORE 1977				
1	ADD TAXIWAYS				
	A EARTHWORK	79.46	3.00	2.38	0.61
	B PAVING	79.46	121.00	96.14	24.85
	C SITE PREPARATION	79.46	4.30	3.41	0.88
2	LAND ACQUISITION	79.46	2.60	2.06	0.53
3	RECONSTRUCT RW(3/21)	79.46	1500.00	1191.89	308.10
4	VASI	79.46	19.00	11.91	3.08
	TOTAL ($000)		1645.92	1307.86	338.09
	TOTAL PROJECT COSTS		1649.92	1307.86	338.09

FEDERAL SHARE OF THE PROJECT COSTS

	FED SHARE	1977	1982	1987	1992
1 AIR CARRIER TERMINAL AREA(SF)	0.00	0.	0.	0.	0.
2 AIR CARRIER CARGO TERMINAL AREA(SF)	0.00	0.	0.	0.	0.
3 AIRLINE AC LOADING POSITIONS(NO.)	0.00	0.	0.	0.	0.
4 AC LOADING & BYPASS APRON AREAS(SY)	79.46	0.	0.	0.	0.
5 AC PUBLIC AUTO PARKING SPACES(NO.)	0.00	0.	0.	0.	0.
6 AC PUBLIC AUTO PARKING AREAS(SY)	0.00	0.	0.	0.	0.
7 AIRPORT MAINTENANCE APRON AREA (SY)	79.46	2431.	429.	528.	566.
8 AIRPORT MAINTENANCE BUILDING(SF)	0.00	0.	0.	0.	0.
9 FIRE & EMERGENCY EQUIPMENT BUILDING(SF)	79.46	9535.	0.	0.	0.
10 NUMBER OF FIRE AND RESCUE VEHICLES	82.00	35260.	0.	0.	0.
11 GA TERMINAL BUILDING AREA(SF)	0.00	0.	0.	0.	0.
12 GA AIRCRAFT LOADING POSITIONS(NUMBER)	0.00	0.	0.	0.	0.
13 GA AC LOADING & BYPASS APRON AREA(SY)	79.46	0.	0.	0.	0.
14 ITINERANT AIRCRAFT PARKING AREA(SY)	79.46	7557.	1216.	1216.	1216.
15 GA BASED AIRCRAFT TIE-DOWN AREA(SY)	79.46	7273.	1669.	1251.	1251.
16 GA CONV HANGAR BLDG AND APRON AREA(SY)	79.46	0.	0.	0.	0.
17 GA *T* HANGAR BLDG & APRON AREA(SY)	79.46	0.	0.	0.	0.
18 GA PUBLIC VEHICULAR PARKING SPACE(NO.)	0.00	0.	0.	0.	0.
19 GA PUBLIC VEHICULAR PARKING AREA(SY)	0.00	0.	0.	0.	0.
20 AIRPORT MAINTENANCE APRON AREA(SY)	79.46	2574.	286.	352.	377.
21 AIRPORT MAINTENANCE BUILDING(SF)	0.00	0.	0.	0.	0.
TOTAL IN THOUSANDS OF DOLLARS		64.6	3.6	3.4	3.4

PROJECT COST LESS FEDERAL GRANTS

	FED SHARE	1977	1982	1987	1992
1 AIR CARRIER TERMINAL AREA(SF)	0.00	0.	0.	0.	0.
2 AIR CARRIER CARGO TERMINAL AREA(SF)	0.00	220.	121.	187.	424.
3 AIRLINE AC LOADING POSITIONS(NO.)	0.00	0.	0.	0.	0.
4 AC LOADING & BYPASS APRON AREAS(SY)	79.46	0.	0.	0.	0.
5 AC PUBLIC AUTO PARKING SPACES(NO.)	0.00	0.	0.	0.	0.
6 AC PUBLIC AUTO PARKING AREAS(SY)	0.00	0.	0.	0.	1020.
7 AIRPORT MAINTENANCE APRON AREA (SY)	79.46	628.	111.	136.	146.
8 AIRPORT MAINTENANCE BUILDING(SF)	0.00	0.	0.	0.	0.
9 FIRE & EMERGENCY EQUIPMENT BUILDING(SF)	79.46	2464.	0.	0.	0.
10 NUMBER OF FIRE AND RESCUE VEHICLES	82.00	7740.	0.	0.	0.
11 GA TERMINAL BUILDING AREA(SF)	0.00	30500.	5500.	5500.	5500.
12 GA AIRCRAFT LOADING POSITIONS(NUMBER)	0.00	0.	0.	0.	0.
13 GA AC LOADING & BYPASS APRON AREA(SY)	79.46	0.	0.	0.	0.
14 ITINERANT AIRCRAFT PARKING AREA(SY)	79.46	1953.	314.	314.	314.
15 GA BASED AIRCRAFT TIE-DOWN AREA(SY)	79.46	1880.	431.	323.	323.
16 GA CONV HANGAR BLDG AND APRON AREA(SY)	79.46	0.	0.	0.	0.
17 GA *T* HANGAR BLDG & APRON AREA(SY)	79.46	0.	0.	0.	0.
18 GA PUBLIC VEHICULAR PARKING AREA(SY)	0.00	28656.	4158.	4158.	4158.
19 GA PUBLIC VEHICULAR PARKING SPACE(NO.)	0.00	0.	0.	0.	0.
20 AIRPORT MAINTENANCE APRON AREA(SY)	79.46	665.	74.	91.	97.
21 AIRPORT MAINTENANCE BUILDING(SF)	0.00	900.	100.	123.	132.
TOTAL IN THOUSANDS OF DOLLARS		75.6	10.8	10.8	12.1

LANDSIDE

LANDSIDE

HELENA

Helena, the capitol of Montana, is just east of the Continental Divide. It is situated in a broad valley area 15 miles west of the Canyon Ferry Lake. Access to the north and south is provided by Interstate 15. U.S. Route 12 serves points west and U.S. Routes 12 and 286 serve the east and southeast. Amtrak has passenger service three days a week to Butte. A bus run to Butte is scheduled to connect with the three day a week Amtrak Chicago-Seattle run.

The airport is located just east of town off Interstate 15. No environmental problems are expected if operations occur from the east. The airport is becoming cramped for space due to commercial and industrial growth and restrictive zoning should be implemented.

Facility Requirements

The forecasted peak hour VFR demand beginning in 1977 will be above the normal capacity of a single runway. Although additional runways are available their configuration is such that they cannot be used simultaneously, to increase traffic capacity, most of the time. Therefore it is recommended that a general aviation runway, parallel to runway 8-26, be planned for implementation by 1977. The forecasted IFR peak hour demand can be handled on the present runway, through the 1992 period.

To accommodate the expected facility demands, Helena's present terminal area has inadequate space for development. Consideration should be given to moving the terminal to the area just north of the airport. Additional parking spaces, apron area, and aircraft loading positions are recommended.

Name: HELENA

Site Number: 12402

County: LEWIS AND CLARK

District: 8

PEAK HOUR IFR AND VFR DEMAND FORECASTS

HELENA, MONTANA	1977	1982	1987	1992
TOTAL PEAK HOUR VFR DEMAND	114.	125.	136.	147.
GA IFR PEAK HOUR DEMAND	10.	13.	17.	21.
AC AND GA IFR PH DEMAND	14.	18.	23.	28.

OPERATIONAL DATA

DEMAND FORECAST INDICATORS

	1977	1982	1987	1992
1 AIR CARRIER PEAK HOUR PASSENGERS	139.0	176.0	217.0	259.0
2 TOTAL AIR CARRIER ANNUAL OPERATIONS	5286.0	6838.0	8452.0	10486.0
3 AIR CARRIER PEAK HOUR OPERATIONS	4.0	5.0	6.0	7.0
4 AIR CARRIER AVERAGE TURN-AROUND TIME	20.0	22.0	24.0	26.0
5 ANNUAL AIR CARGO(FR+ EX+ MAIL)	209.0	314.0	489.0	762.0
6 PERCENT OF AIRCRAFT TYPE=X+	0.0	0.0	0.0	0.0
7 PERCENT OF AIRCRAFT TYPE=X-1+	0.0	0.0	0.0	0.0
8 PERCENT OF AIRCRAFT TYPE=L+	48.0	50.0	52.0	54.0
9 PERCENT OF AIRCRAFT TYPE=M+	32.0	30.0	28.0	26.0
10 PERCENT OF AIRCRAFT TYPE=S AND T+	20.0	20.0	20.0	20.0
11 TOTAL GA ANNUAL OPERATIONS	34400.0	39800.0	45800.0	53400.0
12 GA PEAK HOUR OPERATIONS	110.0	120.0	130.0	140.0
13 PERCENT GA ITINERANT OPERATIONS	50.0	50.0	50.0	50.0
14 BASED AIRCRAFT UNDER 12500 LBS	63.0	70.0	77.0	87.0
15 BASED AIRCRAFT OVER 12500 LBS	1.0	1.0	2.0	2.0

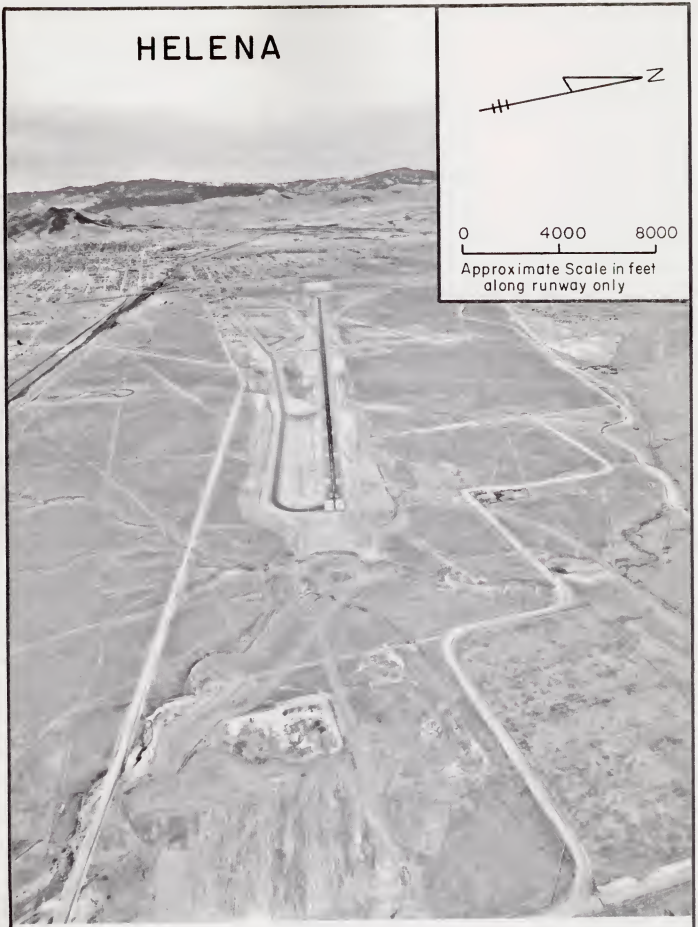
AIRCRAFT MIX AND CAPACITY FORECASTS

	1972	1977	1982	1987	1992
AIRCRAFT TYPE *A+	0	0	1	4	5
AIRCRAFT TYPE *B+	8	12	13	13	15
AIRCRAFT TYPE *C+	0	4	9	13	16
AIRCRAFT TYPE *D+E+	92	84	77	70	64
HOURLY CAPACITY VFR	110	119	128	128	128
HOURLY CAPACITY IFR	52	61	70	70	70
ANNUAL CAPACITY(000)	153	177	208	229	250

DEVELOPMENT COST SUMMARY

PLAN PERIOD	PARTICIPATION	LAND SIDE	AIR SIDE	TOTAL
BEFORE 1977	FEDERAL			
	STATE/LOCAL			
	TOTAL			
1977	FEDERAL	$ 78,000	$ 2,027,000	$ 2,105,000
	STATE/LOCAL	1,165,000	551,000	1,716,000
	TOTAL	1,243,000	2,578,000	3,821,000
1982	FEDERAL	5,000		5,000
	STATE/LOCAL	288,000		288,000
	TOTAL	293,000		293,000
1987	FEDERAL	4,000		4,000
	STATE/LOCAL	251,000		251,000
	TOTAL	255,000		255,000
1992	FEDERAL	7,000	358,000	365,000
	STATE/LOCAL	312,000	92,000	404,000
	TOTAL	319,000	450,000	769,000
TOTAL COSTS TO 1992	FEDERAL	94,000	2,385,000	2,479,000
	STATE/LOCAL	2,016,000	643,000	2,659,000
	TOTAL	2,110,000	3,028,000	5,138,000

HELENA



MSASP AIRFIELD DEVELOPMENT COSTS IN THOUSANDS OF 1972 DOLLARS

HELENA

AIRSIDE

	FED SHARE	TOTAL	FED GRANTS	STATE/LOCAL
1977				
1 RELOCATE A&C& TERMINAL (REPLACEMENT COST ONLY)	0.00	60.00	0.00	60.00
A ACCESS RD.(ON ARPT)	79.46	130.00	103.29	26.70
B PARKING	0.00	4.00	0.00	4.00
C ADD TAXIWAYS	79.46	1400.00	1112.43	287.56
D TAXIWAY LIGHTS	79.46	60.00	47.67	12.32
E APRONS	79.46	320.00	254.27	65.72
2 PARALLEL GA RUNWAY				
A EARTHWORK	79.46	20.00	15.89	4.10
B MIRL	79.46	32.00	25.42	6.57
C PAVING	79.46	400.00	317.83	82.16
3 RELOCATE CONTROL TOWER	100.00	150.00	150.00	0.00
TOTAL ($000)		2578.04	2026.89	551.20
1992				
4 OVERLAY R/W (8-26)	79.46	450.00	357.57	92.43
TOTAL ($000)		450.00	357.57	92.43
TOTAL PROJECT COSTS		3028.05	2384.46	643.64

LANDSIDE

FEDERAL SHARE OF THE PROJECT COSTS

	FED SHARE	1977	1982	1987	1992
1 AIR CARRIER TERMINAL AREA(SF)	0.00	0.	0.	0.	0.
2 AIR CARRIER CARGO TERMINAL AREA(SF)	0.00	0.	0.	0.	0.
3 AIRLINE AC LOADING POSITIONS(NO.)	0.00	0.	0.	0.	0.
4 AC LOADING & BYPASS APRON AREAS(SY)	79.46	0.	0.	0.	0.
5 AC PUBLIC AUTO PARKING SPACES(NO.)	0.00	0.	0.	0.	0.
6 AC PUBLIC AUTO PARKING AREAS(SY)	0.00	0.	0.	0.	0.
7 AIRPORT MAINTENANCE APRON AREA (SY)	79.46	0.	0.	912.	2067.
8 AIRPORT MAINTENANCE BUILDING(SF)	0.00	0.	0.	0.	0.
9 FIRE & EMERGENCY EQUIPMENT BUILDING(SF)	79.46	16686.	0.	0.	0.
10 NUMBER OF FIRE AND RESCUE VEHICLES	82.00	35260.	0.	0.	0.
11 GA TERMINAL BUILDING AREA(SF)	0.00	0.	0.	0.	0.
12 GA AIRCRAFT LOADING POSITIONS(NUMBER)	0.00	0.	0.	0.	0.
13 GA AC LOADING & BYPASS APRON AREA(SY)	79.46	0.	0.	0.	0.
14 ITINERANT AIRCRAFT PARKING AREA(SY)	79.46	20429.	3647.	2431.	3647.
15 GA BASED AIRCRAFT TIE-DOWN AREA(SY)	79.46	0.	0.	0.	0.
16 GA CONV HANGAR BLDG AND APRON AREA(SY)	79.46	0.	0.	0.	0.
17 GA *T* HANGAR BLDG & APRON AREA(SY)	79.46	0.	0.	0.	0.
18 GA PUBLIC VEHICULAR PARKING SPACE(NO.)	0.00	0.	0.	0.	0.
19 GA PUBLIC VEHICULAR PARKING AREA(SY)	0.00	0.	0.	0.	0.
20 AIRPORT MAINTENANCE APRON AREA(SY)	79.46	5676.	994.	1089.	1378.
21 AIRPORT MAINTENANCE BUILDING(SF)	0.00	0.	0.	0.	0.
TOTAL IN THOUSANDS OF DOLLARS		78.1	4.6	4.4	7.1

PROJECT COST LESS FEDERAL GRANTS

	FED SHARE	1977	1982	1987	1992
1 AIR CARRIER TERMINAL AREA(SF)	0.00	857400.	244200.	205500.	264600.
2 AIR CARRIER CARGO TERMINAL AREA(SF)	0.00	1152.	579.	964.	1505.
3 AIRLINE AC LOADING POSITIONS(NO.)	0.00	0.	0.	0.	0.
4 AC LOADING & BYPASS APRON AREAS(SY)	79.46	0.	0.	0.	0.
5 AC PUBLIC AUTO PARKING SPACES(NO.)	0.00	0.	0.	0.	0.
6 AC PUBLIC AUTO PARKING AREAS(SY)	0.00	40218.	17094.	18942.	19404.
7 AIRPORT MAINTENANCE APRON AREA (SY)	79.46	0.	0.	235.	534.
8 AIRPORT MAINTENANCE BUILDING(SF)	0.00	0.	0.	0.	0.
9 FIRE & EMERGENCY EQUIPMENT BUILDING(SF)	79.46	4313.	0.	0.	0.
10 NUMBER OF FIRE AND RESCUE VEHICLES	82.00	7740.	0.	0.	0.
11 GA TERMINAL BUILDING AREA(SF)	0.00	133250.	13750.	13750.	13750.
12 GA AIRCRAFT LOADING POSITIONS(NUMBER)	0.00	0.	0.	0.	0.
13 GA AC LOADING & BYPASS APRON AREA(SY)	79.46	0.	0.	0.	0.
14 ITINERANT AIRCRAFT PARKING AREA(SY)	79.46	5280.	942.	628.	942.
15 GA BASED AIRCRAFT TIE-DOWN AREA(SY)	79.46	0.	0.	0.	0.
16 GA CONV HANGAR BLDG AND APRON AREA(SY)	79.46	0.	0.	0.	0.
17 GA *T* HANGAR BLDG & APRON AREA(SY)	79.46	0.	0.	0.	0.
18 GA PUBLIC VEHICULAR PARKING SPACE(NO.)	0.00	0.	0.	0.	0.
19 GA PUBLIC VEHICULAR PARKING AREA(SY)	0.00	111945.	10395.	10395.	10395.
20 AIRPORT MAINTENANCE APRON AREA(SY)	79.46	1467.	257.	281.	356.
21 AIRPORT MAINTENANCE BUILDING(SF)	0.00	1984.	348.	381.	492.
TOTAL IN THOUSANDS OF DOLLARS		1164.8	287.6	251.1	312.0

KALISPELL (G.P.I.)

The city of Kalispell is situated in the Flathead River Valley of northwest Montana. Flathead Lake lies 8 miles south on U.S. 93. The Flathead National Forest is found in every direction around Kalispell. U.S. Route 2 provides access to the west and northwest. U.S. Route 39 and State Route 206 give access to the north.

Glacier Park International is located 7 miles north of Kalispell off State Route 206. Glacier National Park is 20 miles to the northwest. It is felt that the operations that cannot be accommodated at the Kalispell City Airport will be transferred to this airport. Current activity is of aircraft type "D&E". No environmental problems are cited.

Facility Requirements

The total peak hour VFR demand rises to 100 by 1992 at which time demand will exceed the capacity of the present airfield system. It is recommended that a short general aviation runway parallel to runway 1-19 be planned for construction near the 1987 period. Terminal area forecast growth requirements include considerable terminal, parking, maintenance, apron and loading space. Also fire and rescue equipment need to be added during two different periods. The total IFR peak hour demand can be accommodated on the present runway facilities. Since present minima are 600/1 the MSASP endorses the ILS scheduled for installation in 1974. It is recommended that a DME be co-located with the Kalispell VOR.

Name: KALISPELL - G.P.I.

Site Number:. 12416

County: FLATHEAD

District:. 10

PEAK HOUR IFR AND VFR DEMAND FORECASTS

KALISPELL PARK, MONTANA	1977	1982	1987	1992
TOTAL PEAK HOUR VFR DEMAND	63.	77.	87.	100.
GA IFR PEAK HOUR DEMAND	5.	8.	11.	14.
AC AND GA IFR PH DEMAND	8.	11.	15.	20.

OPERATIONAL DATA

DEMAND FORECAST INDICATORS	1977	1982	1987	1992
1 AIR CARRIER PEAK HOUR PASSENGERS	85.0	107.0	175.0	247.0
2 TOTAL AIR CARRIER ANNUAL OPERATIONS	2314.0	3500.0	5556.0	8800.0
3 AIR CARRIER PEAK HOUR OPERATIONS	3.0	3.0	4.0	6.0
4 AIR CARRIER AVERAGE TURN-AROUND TIME	15.0	17.0	19.0	21.0
5 ANNUAL AIR CARGO(FR* EX* MAIL)	83.0	147.0	263.0	477.0
6 PERCENT OF AIRCRAFT TYPE*X*	0.0	0.0	0.0	0.0
7 PERCENT OF AIRCRAFT TYPE*X-1*	0.0	0.0	0.0	0.0
8 PERCENT OF AIRCRAFT TYPE*L*	0.0	0.0	5.0	10.0
9 PERCENT OF AIRCRAFT TYPE*M*	80.0	85.0	80.0	75.0
10 PERCENT OF AIRCRAFT TYPE*S AND T*	20.0	15.0	15.0	15.0
11 TOTAL GA ANNUAL OPERATIONS	35000.0	40000.0	45680.0	52500.0
12 GA PEAK HOUR OPERATIONS	60.0	74.0	83.0	94.0
13 PERCENT GA ITINERANT OPERATIONS	30.0	34.0	37.0	40.0
14 BASED AIRCRAFT UNDER 12500 LBS	52.0	64.0	75.0	89.0
15 BASED AIRCRAFT OVER 12500 LBS	1.0	1.0	2.0	2.0

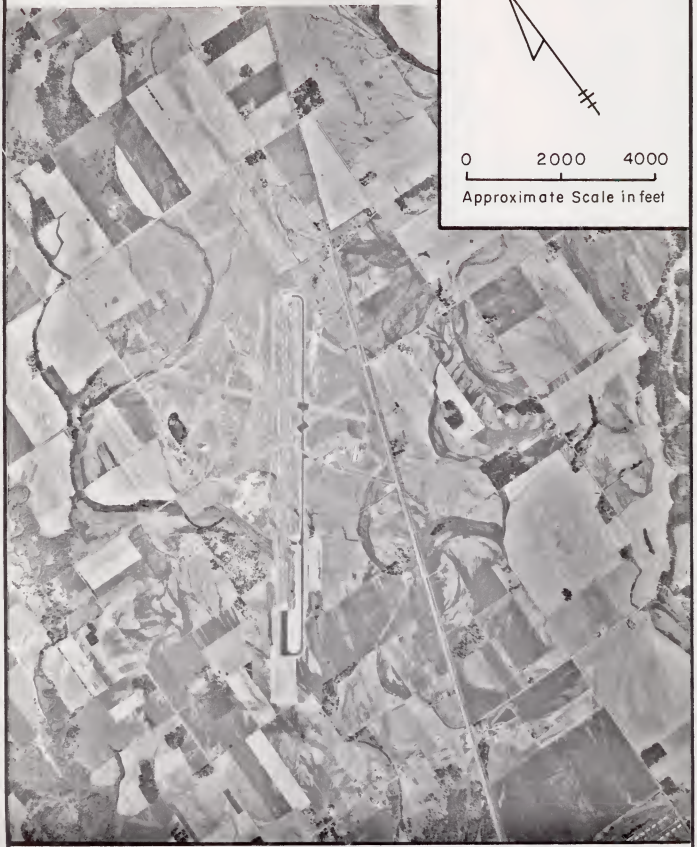
AIRCRAFT MIX AND CAPACITY FORECASTS

	1972	1977	1982	1987	1992
AIRCRAFT TYPE *A*	0	0	0	3	6
AIRCRAFT TYPE *B*	3	4	6	10	16
AIRCRAFT TYPE *C*	0	2	4	5	6
AIRCRAFT TYPE *D+E*	97	94	90	82	72
HOURLY CAPACITY VFR	93	94	95	95	93
HOURLY CAPACITY IFR	53	52	52	52	52
ANNUAL CAPACITY(000)	129	131	132	145	161

DEVELOPMENT COST SUMMARY

PLAN PERIOD	PARTICIPATION	LAND SIDE	AIR SIDE	TOTAL
BEFORE 1977	FEDERAL	$	$ 397,000	$ 397,000
	STATE/LOCAL		4,000	4,000
	TOTAL		401,000	401,000
1977	FEDERAL	73,000		73,000
	STATE/LOCAL	513,000		513,000
	TOTAL	586,000		586,000
1982	FEDERAL	12,000	159,000	171,000
	STATE/LOCAL	388,000	41,000	429,000
	TOTAL	400,000	200,000	600,000
1987	FEDERAL	65,000	670,000	735,000
	STATE/LOCAL	519,000	174,000	693,000
	TOTAL	584,000	843,000	1,427,000
1992	FEDERAL	14,000		14,000
	STATE/LOCAL	466,000		466,000
	TOTAL	480,000		480,000
TOTAL COSTS TO 1992	FEDERAL	164,000	1,226,000	1,390,000
	STATE/LOCAL	1,886,000	219,000	2,105,000
	TOTAL	2,050,000	1,445,000	3,495,000

KALISPELL G.P.I.



MSASP AIRFIELD DEVELOPMENT COSTS IN THOUSANDS OF 1972 DOLLARS

KALISPELL GPI

AIRSIDE

		FED SHARE	TOTAL	FED GRANTS	STATE/LOCAL
	BEFORE 1977				
1	OBSTRUCTION REMOVAL	79.46	1.00	0.79	0.20
2	ADD ILS	100.00	350.00	350.00	0.00
3	OME	100.00	30.00	30.00	0.00
4	MALS	79.46	20.00	15.89	4.10
	TOTAL ($000)		401.01	396.70	4.33
	1982				
6	EXTEND RW(1/19)	79.46	200.00	158.91	41.08
	TOTAL ($000)		200.00	158.92	41.08
	1987				
7	PARALLEL G.A. RUNWAY				
	A EARTHWORK	79.46	20.00	15.89	4.10
	B PAVING	79.46	350.00	278.10	71.89
	C MIRL	79.46	28.00	22.24	5.75
	D DRAINAGE	79.46	2.00	1.58	0.41
	E SITE PREPARATION	79.46	15.00	11.91	3.08
8	MIRL	79.46	4.50	4.37	1.12
9	2'' OVERLAY PARALLEL TW	79.46	125.00	99.32	25.67
1	2'' OVERLAY RW(1/19)	79.46	260.00	206.59	53.40
2	2'' OVERLAY A.C. APRON	79.46	38.00	30.19	7.80
	TOTAL ($000)		843.54	670.28	173.29
	TOTAL PROJECT COSTS		1444.56	1225.92	218.71

LANDSIDE

FEDERAL SHARE OF THE PROJECT COSTS

		FED SHARE	1977	1982	1987	1992
1	AIR CARRIER TERMINAL AREA(SF)	0.00	0.	0.	0.	0.
2	AIR CARRIER CARGO TERMINAL AREA(SF)	0.00	0.	0.	0.	0.
3	AIRLINE AC LOADING POSITIONS(NO.)	0.00	0.	0.	0.	0.
4	AC LOADING & BYPASS APRON AREAS(SY)	79.46	0.	0.	0.	0.
5	AC PUBLIC AUTO PARKING SPACES(NO.)	0.00	0.	0.	0.	0.
6	AC PUBLIC AUTO PARKING AREAS(SY)	0.00	0.	0.	0.	0.
7	AIRPORT MAINTENANCE APRON AREA (SY)	79.46	6718.	1327.	1660.	2159.
8	AIRPORT MAINTENANCE BUILDING(SF)	0.00	0.	0.	0.	0.
9	FIRE & EMERGENCY EQUIPMENT BUILDING(SF)	79.46	9535.	0.	19070.	0.
10	NUMBER OF FIRE AND RESCUE VEHICLES	82.00	35260.	0.	35260.	0.
11	GA TERMINAL BUILDING AREA(SF)	0.00	0.	0.	0.	0.
12	GA AIRCRAFT LOADING POSITIONS(NUMBER)	0.00	0.	0.	0.	0.
13	GA AC LOADING & BYPASS APRON AREA(SY)	79.46	0.	0.	0.	0.
14	ITINERANT AIRCRAFT PARKING AREA(SY)	79.46	5840.	4863.	2431.	4863.
15	GA BASED AIRCRAFT TIE-DOWN AREA(SY)	79.46	9895.	5006.	5661.	5840.
16	GA CONV HANGAR BLDG AND APRON AREA(SY)	79.46	0.	0.	0.	0.
17	GA *T* HANGAR BLDG & APRON AREA(SY)	79.46	0.	0.	0.	0.
18	GA PUBLIC VEHICULAR PARKING SPACE(NO.)	0.00	0.	0.	0.	0.
19	GA PUBLIC VEHICULAR PARKING AREA(SY)	0.00	0.	0.	0.	0.
20	AIRPORT MAINTENANCE APRON AREA(SY)	79.46	5337.	885.	1106.	1439.
21	AIRPORT MAINTENANCE BUILDINGTSF)	0.00	0.	0.	0.	0.
	TOTAL IN THOUSANDS OF DOLLARS		72.6	12.1	65.2	14.3

PROJECT COST LESS FEDERAL GRANTS

		FED SHARE	1977	1982	1987	1992
1	AIR CARRIER TERMINAL AREA(SF)	0.00	334500.	326700.	448800.	401100.
2	AIR CARRIER CARGO TERMINAL AREA(SF)	0.00	457.	353.	639.	1179.
3	AIRLINE AC LOADING POSITIONS(NO.)	0.00	0.	0.	0.	0.
4	AC LOADING & BYPASS APRON AREAS(SY)	79.46	0.	0.	0.	0.
5	AC PUBLIC AUTO PARKING SPACES(NO.)	0.00	0.	0.	0.	0.
6	AC PUBLIC AUTO PARKING AREAS(SY)	0.00	19110.	2402*.	31416.	33264.
7	AIRPORT MAINTENANCE APRON AREA (SY)	79.46	1738.	343.	429.	558.
8	AIRPORT MAINTENANCE BUILDING(SF)	0.00	0.	0.	0.	0.
9	FIRE & EMERGENCY EQUIPMENT BUILDING(SF)	79.46	2466.	0.	4929.	0.
10	NUMBER OF FIRE AND RESCUE VEHICLES	82.00	7740.	0.	7740.	0.
11	GA TERMINAL BUILDING AREA(SF)	0.00	79500.	19250.	12375.	15125.
12	GA AIRCRAFT LOADING POSITIONS(NUMBER)	0.00	0.	0.	0.	0.
13	GA AC LOADING & BYPASS APRON AREA(SY)	79.46	0.	0.	0.	0.
14	ITINERANT AIRCRAFT PARKING AREA(SY)	79.46	1509.	1257.	628.	1257.
15	GA BASED AIRCRAFT TIE-DOWN AREA(SY)	79.46	2557.	1294.	1463.	1509.
16	GA CONV HANGAR BLDG AND APRON AREA(SY)	79.46	0.	0.	0.	0.
17	GA *T* HANGAR BLDG & APRON AREA(SY)	79.46	0.	0.	0.	0.
18	GA PUBLIC VEHICULAR PARKING SPACE(NO.)	0.00	0.	0.	0.	0.
19	GA PUBLIC VEHICULAR PARKING AREA(SY)	0.00	59670.	14553.	9356.	11435.
20	AIRPORT MAINTENANCE APRON AREA(SY)	79.46	1379.	228.	286.	372.
21	AIRPORT MAINTENANCE BUILDING(SF)	0.00	1866.	309.	387.	503.
	TOTAL IN THOUSANDS OF DOLLARS		512.5	388.3	518.5	466.3

LEWISTOWN

The city of Lewistown is situated in the plains region of central Montana. It is southwest of the Judith Mountains and north of the Big Snowy Mountains. U. S. Routes 191 and 87 comprise the road system.

The Lewistown Municipal airport is 1 mile southwest of the city off State Route 97 and 191. Some 'B' type aircraft activity is expected by 1987. No environmental problems are cited if operations occur from the southwest.

Facility Requirements

The total peak hour VFR demand can be handled by the present runway system. Although present minima are 400/1, the IFR peak hour demand through 1992 can be accommodated using the present VOR/DME as approach aid.

Some runway and taxiway extensions should be accomplished before 1987.

The major portion of costs will be required for terminal area equipment, buildings and fire and rescue vehicles.

Reconstruction

Before the very costly runway/taxiway/apron reconstruction is begun, a detailed master plan and/or feasibility study should be initiated.

Name: LEWISTOWN

Site Number: 12426

County: FERGUS

District: 6

PEAK HOUR IFR AND VFR DEMAND FORECASTS

LEWISTOWN, MONTANA	1977	1982	1987	1992
TOTAL PEAK HOUR VFR DEMAND	37.	42.	45.	49.
GA IFR PEAK HOUR DEMAND	3.	4.	6.	7.
AC AND GA IFR PH DEMAND	5.	6.	8.	9.

OPERATIONAL DATA

DEMAND FORECAST INDICATORS

	1977	1982	1987	1992
1 AIR CARRIER PEAK HOUR PASSENGERS	2.0	5.0	7.0	9.0
2 TOTAL AIR CARRIER ANNUAL OPERATIONS	934.0	2000.0	2400.0	3300.0
3 AIR CARRIER PEAK HOUR OPERATIONS	2.0	2.0	2.0	2.0
4 AIR CARRIER AVERAGE TURN-AROUND TIME	7.0	9.0	10.0	11.0
5 ANNUAL AIR CARGO(FR+ EX+ MAIL)	27.0	47.0	78.0	150.0
6 PERCENT OF AIRCRAFT TYPE*X*	0.0	0.0	0.0	0.0
7 PERCENT OF AIRCRAFT TYPE*X-1*	0.0	0.0	0.0	0.0
8 PERCENT OF AIRCRAFT TYPE*L*	0.0	0.0	0.0	0.0
9 PERCENT OF AIRCRAFT TYPE*M*	0.0	3.0	7.0	10.0
10 PERCENT OF AIRCRAFT TYPE*S AND T*	100.0	97.0	93.0	90.0
11 TOTAL GA ANNUAL OPERATIONS	21800.0	23800.0	26200.0	28400.0
12 GA PEAK HOUR OPERATIONS	35.0	40.0	43.0	47.0
13 PERCENT GA ITINERANT OPERATIONS	50.0	50.0	50.0	50.0
14 BASED AIRCRAFT UNDER 12500 LBS	53.0	57.0	61.0	64.0
15 BASED AIRCRAFT OVER 12500 LBS	1.0	1.0	1.0	1.0

AIRCRAFT MIX AND CAPACITY FORECASTS

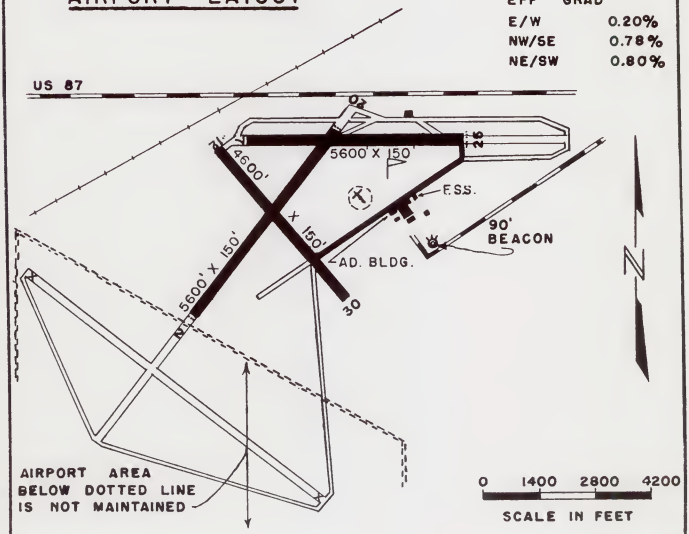
	1972	1977	1982	1987	1992
AIRCRAFT TYPE *A*	0	0	0	0	0
AIRCRAFT TYPE *B*	0	0	0	6	12
AIRCRAFT TYPE *C*	9	14	19	18	17
AIRCRAFT TYPE *D+F*	91	86	81	76	71
HOURLY CAPACITY VFR	80	88	96	96	96
HOURLY CAPACITY IFR	6	6	6	6	6
ANNUAL CAPACITY(000)	111	128	148	158	169

DEVELOPMENT COST SUMMARY

PLAN PERIOD	PARTICIPATION	LAND SIDE	AIR SIDE	TOTAL
BEFORE 1977	FEDERAL			
	STATE/LOCAL			
	TOTAL			
1977	FEDERAL	$ 65,000	$	$ 65,000
	STATE/LOCAL	82,000		82,000
	TOTAL	147,000		147,000
1982	FEDERAL	4,000		4,000
	STATE/LOCAL	14,000		14,000
	TOTAL	18,000		18,000
1987	FEDERAL	4,000	3,705,000	3,709,000
	STATE/LOCAL	10,000	958,000	968,000
	TOTAL	14,000	4,663,000	4,677,000
1992	FEDERAL	3,000		3,000
	STATE/LOCAL	12,000		12,000
	TOTAL	15,000		15,000
TOTAL COSTS TO 1992	FEDERAL	76,000	3,705,000	3,781,000
	STATE/LOCAL	118,000	958,000	1,076,000
	TOTAL	194,000	4,663,000	4,857,000

LEWISTOWN

AIRPORT LAYOUT



MSASP AIRFIELD DEVELOPMENT COSTS IN THOUSANDS OF 1972 DOLLARS

LEWISTOWN

AIRSIDE

		FED SHARE	TOTAL	FED GRANTS	STATE/LOCAL
	1987				
1	EXTEND RW(2-20)				
	A EARTHWORK	79.46	3.00	2.38	0.61
	B SITE PREPARATION	79.46	4.00	3.17	0.82
	C DRAINAGE	79.46	1.40	1.11	0.28
	D PAVING	79.46	215.00	170.83	44.16
	E MIRL	79.46	12.60	10.01	2.58
2	ADD TAXIWAY				
	A EARTHWORK	79.46	11.70	9.29	2.40
	B PAVING	79.46	100.00	79.45	20.54
3	RECONSTRUCT RW(2/20) AND RW(7/25)	79.46	2800.00	2224.87	575.12
4	RECONSTRUCT T/W + APRONS	79.46	1500.00	1191.89	308.10
5	VASI	79.46	15.00	11.91	3.08
	TOTAL (5000)		4662.75	3705.02	957.76
	TOTAL PROJECT COSTS		4662.75	3705.02	957.76

LANDSIDE

FEDERAL SHARE OF THE PROJECT COSTS

	FED SHARE	1977	1982	1987	1992
1 AIR CARRIER TERMINAL AREA(SF)	0.00	0.	0.	0.	0.
2 AIR CARRIER CARGO TERMINAL AREA(SF)	0.00	0.	0.	0.	0.
3 AIRLINE AC LOADING POSITIONS(NO.)	0.00	0.	0.	0.	0.
4 AC LOADING & BYPASS APRON AREAS(SY)	79.46	0.	0.	0.	0.
5 AC PUBLIC AUTO PARKING SPACES(NO.)	0.00	0.	0.	0.	0.
6 AC PUBLIC AUTO PARKING AREAS(SY)	0.00	0.	0.	0.	0.
7 AIRPORT MAINTENANCE APRON AREA (SY)	79.46	4877.	658.	601.	665.
8 AIRPORT MAINTENANCE BUILDING(SF)	0.00	0.	0.	0.	0.
9 FIRE & EMERGENCY EQUIPMENT BUILDING(SF)	79.46	9535.	0.	0.	0.
10 NUMBER OF FIRE AND RESCUE VEHICLES	82.00	35260.	0.	0.	0.
11 GA TERMINAL BUILDING AREA(SF)	0.00	0.	0.	0.	0.
12 GA AIRCRAFT LOADING POSITIONS(NUMBER)	0.00	0.	0.	0.	0.
13 GA AC LOADING & BYPASS APRON AREA(SY)	79.46	0.	0.	0.	0.
14 ITINERANT AIRCRAFT PARKING AREA(SY)	79.46	7127.	1216.	1216.	1216.
15 GA BASED AIRCRAFT TIE-DOWN AREA(SY)	79.46	7928.	1669.	1669.	1251.
16 GA CONV HANGAR BLDG AND APRON AREA(SY)	79.46	0.	0.	0.	0.
17 GA *T* HANGAR BLDG & APRON AREA(SY)	79.46	0.	0.	0.	0.
18 GA PUBLIC VEHICULAR PARKING SPACE(NO.)	0.00	0.	0.	0.	0.
19 GA PUBLIC VEHICULAR PARKIMG AREA(SY)	0.00	0.	0.	0.	0.
20 AIRPORT MAINTENANCE APRON AREA(SY)	79.46	0.	0.	0.	0.
21 AIRPORT MAINTENANCE BUILDING(SF)	0.00	0.	0.	0.	0.
TOTAL IN THOUSANDS OF DOLLARS		64.7	3.5	3.5	3.1

PROJECT COST LESS FEDERAL GRANTS

	FED SHARE	1977	1982	1987	1992
1 AIR CARRIER TERMINAL AREA(SF)	0.00	0.	0.	0.	0.
2 AIR CARRIER CARGO TERMINAL AREA(SF)	0.00	149.	110.	171.	397.
3 AIRLINE AC LOADING POSITIONS(NO.)	0.00	0.	0.	0.	0.
4 AC LOADING & BYPASS APRON AREAS(SY)	79.46	0.	0.	0.	0.
5 AC PUBLIC AUTO PARKING SPACES(NO.)	0.00	0.	0.	0.	0.
6 AC PUBLIC AUTO PARKING AREAS(SY)	0.00	0.	690.	924.	924.
7 AIRPORT MAINTENANCE APRON AREA (SY)	79.46	1260.	170.	155.	172.
8 AIRPORT MAINTENANCE BUILDING(SF)	0.00	2728.	368.	336.	372.
9 FIRE & EMERGENCY EQUIPMENT BUILDING(SF)	79.46	2466.	0.	0.	0.
10 NUMBER OF FIRE AND RESCUE VEHICLES	82.00	7740.	0.	0.	0.
11 GA TERMINAL BUILDING AREA(SF)	0.00	28125.	6875.	4125.	5500.
12 GA AIRCRAFT LOADING POSITIONS(NUMBER)	0.00	0.	0.	0.	0.
13 GA AC LOADING & BYPASS APRON AREA(SY)	79.46	0.	0.	0.	0.
14 ITINERANT AIRCRAFT PARKING AREA(SY)	79.46	1842.	314.	314.	314.
15 GA BASED AIRCRAFT TIE-DOWN AREA(SY)	79.46	2049.	431.	431.	323.
16 GA CONV HANGAR BLDG AND APRON AREA(SY)	79.46	0.	0.	0.	0.
17 GA *T* HANGAR BLDG & APRON AREA(SY)	79.46	0.	0.	0.	0.
18 GA PUBLIC VEHICULAR PARKING SPACE(NO.)	0.00	0.	0.	0.	0.
19 GA PUBLIC VEHICULAR PARKIMG AREA(SY)	0.00	35932.	5198.	3119.	4158.
20 AIRPORT MAINTENANCE APRON AREA(SY)	79.46	0.	0.	0.	0.
21 AIRPORT MAINTENANCE BUILDING(SF)	0.00	0.	0.	0.	0.
TOTAL IN THOUSANDS OF DOLLARS		82.3	14.2	9.6	12.2

MILES CITY

Miles city is situated in the generally rolling terrain of southeast Montana. The city is on the Yellowstone River and is 60 miles northeast of the Crow and Norhtern Cheyenne Indian Reservations. Interstate 94 gives access to the northeast and to the west. U.S. Routes 12 and 312 serves the east and southeast. Rail passenger service is provided by Amtrak three days a week between Forsyth and Glendive.

The airport is 1 1/2 miles north of the city off State Route 22. The existing air fleet is principally type 'C' and 'D & E' aircraft, however a small usage by type 'B' is reported.

Facility Requirements

The total peak hour demand can be accommodated by the present runway layout.

The major items of cost will be fire and rescue equipment and general aviation buildings prior to 1982 at which time it will be necessary to increase the terminal space.

No new NAVAIDS will be required.

Name: MILES CITY

Site Number: 12450

County: CUSTER

District: 3

PEAK HOUR IFR AND VFR DEMAND FORECASTS

	1977	1982	1987	1992
MILES CITY, MONTANA				
TOTAL PEAK HOUR VFR DEMAND	32.	36.	42.	47.
GA IFR PEAK HOUR DEMAND	3.	4.	5.	7.
AC AND GA IFR PH DEMAND	5.	6.	7.	9.

OPERATIONAL DATA

DEMAND FORECAST INDICATORS	1977	1982	1987	1992
1 AIR CARRIER PEAK HOUR PASSENGERS	4.0	8.0	13.0	18.0
2 TOTAL AIR CARRIER ANNUAL OPERATIONS	1300.0	1956.0	1818.0	2100.0
3 AIR CARRIER PEAK HOUR OPERATIONS	2.0	2.0	2.0	2.0
4 AIR CARRIER AVERAGE TURN-AROUND TIME	12.0	14.0	15.0	16.0
5 ANNUAL AIR CARGO(FR+ EX+ MAIL)	39.0	71.0	129.0	224.0
6 PERCENT OF AIRCRAFT TYPE=X=	0.0	0.0	0.0	0.0
7 PERCENT OF AIRCRAFT TYPE=X-1=	0.0	0.0	0.0	0.0
8 PERCENT OF AIRCRAFT TYPE=L=	0.0	0.0	0.0	0.0
9 PERCENT OF AIRCRAFT TYPE=M=	0.0	3.0	7.0	10.0
10 PERCENT OF AIRCRAFT TYPE=S AND T=	100.0	97.0	93.0	90.0
11 TOTAL GA ANNUAL OPERATIONS	14800.0	17200.0	19200.0	21600.0
12 GA PEAK HOUR OPERATIONS	30.0	34.0	40.0	45.0
13 PERCENT GA ITINERANT OPERATIONS	50.0	50.0	50.0	50.0
14 BASED AIRCRAFT UNDER 12500 LBS	37.0	39.0	40.0	41.0
15 BASED AIRCRAFT OVER 12500 LBS	1.0	1.0	1.0	1.0

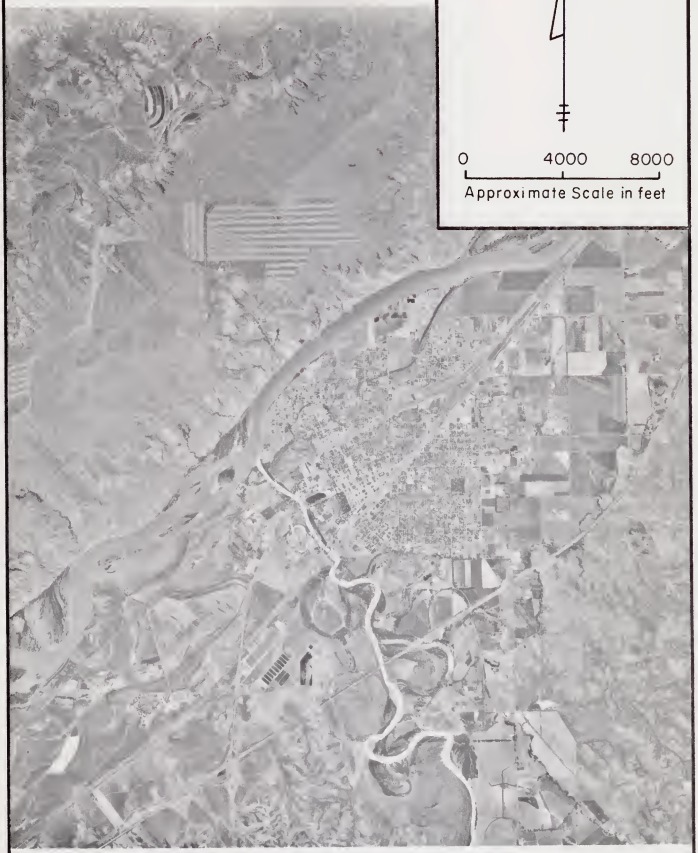
AIRCRAFT MIX AND CAPACITY FORECASTS

	1972	1977	1982	1987	1992
AIRCRAFT TYPE =A=	0	0	0	0	0
AIRCRAFT TYPE =B=	0	0	0	4	12
AIRCRAFT TYPE =C=	9	17	24	28	26
AIRCRAFT TYPE =D+E=	91	83	76	68	62
HOURLY CAPACITY VFR	74	87	99	96	92
HOURLY CAPACITY IFR	53	52	52	52	52
ANNUAL CAPACITY(000)	103	131	163	176	185

DEVELOPMENT COST SUMMARY

PLAN PERIOD	PARTICIPATION	LAND SIDE	AIR SIDE	TOTAL
BEFORE 1977	FEDERAL	$	$ 12,000	$ 12,000
	STATE/LOCAL		3,000	3,000
	TOTAL		15,000	15,000
1977	FEDERAL	65,000		65,000
	STATE/LOCAL	78,000		78,000
	TOTAL	143,000		143,000
1982	FEDERAL	2,000		2,000
	STATE/LOCAL	21,000		21,000
	TOTAL	23,000		23,000
1987	FEDERAL	3,000		3,000
	STATE/LOCAL	51,000		51,000
	TOTAL	54,000		54,000
1992	FEDERAL	2,000		2,000
	STATE/LOCAL	50,000		50,000
	TOTAL	52,000		52,000
TOTAL COSTS TO 1992	FEDERAL	72,000	12,000	84,000
	STATE/LOCAL	200,000	3,000	203,000
	TOTAL	272,000	15,000	287,000

MILES CITY



MEASP AIRFIELD DEVELOPMENT COSTS IN THOUSANDS OF 1972 DOLLARS

MILES CITY

	FED SHARE	TOTAL	FED GRANTS	STATE/LOCAL
BEFORE 1977				
1 VASI	79.46	15.00	11.91	3.08
TOTAL ($000)		15.00	11.92	3.08
TOTAL PROJECT COSTS		15.00	11.92	3.08

AIRSIDE

FEDERAL SHARE OF THE PROJECT COSTS

	FED SHARE	1977	1982	1987	1992
1 AIR CARRIER TERMINAL AREA(SF)	0.00	0.	0.	0.	0.
2 AIR CARRIER CARGO TERMINAL AREA(SF)	0.00	0.	0.	0.	0.
3 AIRLINE AC LOADING POSITIONS(NO.)	0.00	0.	0.	0.	0.
4 AC LOADING & BYPASS APRON AREA(SY)	79.46	0.	0.	0.	0.
5 AC PUBLIC AUTO PARKING SPACES(NO.)	0.00	0.	0.	0.	0.
6 AC PUBLIC AUTO PARKING AREA(SY)	0.00	0.	0.	0.	0.
7 AIRPORT MAINTENANCE APRON AREA (SY)	79.46	0.	0.	0.	0.
8 AIRPORT MAINTENANCE BUILDING(SF)	0.00	0.	0.	0.	0.
9 FIRE & EMERGENCY EQUIPMENT BUILDING(SF)	79.46	9535.	0.	0.	0.
10 NUMBER OF FIRE AND RESCUE VEHICLES	82.00	35260.	0.	0.	0.
11 GA TERMINAL BUILDING AREA(SF)	0.00	0.	0.	0.	0.
12 GA AIRCRAFT LOADING POSITIONS(NUMBER)	0.00	0.	0.	0.	0.
13 GA AC LOADING & BYPASS APRON AREA(SY)	79.46	0.	0.	0.	0.
14 ITINERANT AIRCRAFT PARKING AREA(SY)	79.46	5650.	1216.	2431.	1216.
15 GA BASED AIRCRAFT TIE-DOWN AREA(SY)	79.46	0.	0.	0.	0.
16 GA CONV HANGAR BLDG AND APRON AREA(SY)	79.46	0.	0.	0.	0.
17 GA *T* HANGAR BLDG & APRON AREA(SY)	79.46	11911.	644.	322.	322.
18 GA PUBLIC VEHICULAR PARKING SPACE(NO.)	0.00	0.	0.	0.	0.
19 GA PUBLIC VEHICULAR PARKING AREA(SY)	0.00	0.	0.	0.	0.
20 AIRPORT MAINTENANCE APRON AREA(SY)	79.46	2303.	380.	329.	383.
21 AIRPORT MAINTENANCE BUILDING(SF)	0.00	0.	0.	0.	0.
TOTAL IN THOUSANDS OF DOLLARS		64.7	2.2	3.1	1.9

LANDSIDE

PROJECT COST LESS FEDERAL GRANTS

	FED SHARE	1977	1982	1987	1992
1 AIR CARRIER TERMINAL AREA(SF)	0.00	0.	10200.	34500.	34500.
2 AIR CARRIER CARGO TERMINAL AREA(SF)	0.00	215.	176.	320.	535.
3 AIRLINE AC LOADING POSITIONS(NO.)	0.00	0.	0.	0.	0.
4 AC LOADING & BYPASS APRON AREA(SY)	79.46	0.	0.	0.	0.
5 AC PUBLIC AUTO PARKING SPACES(NO.)	0.00	0.	0.	0.	0.
6 AC PUBLIC AUTO PARKING AREA(SY)	0.00	0.	0.	606.	2310.
7 AIRPORT MAINTENANCE APRON AREA(SY)	79.46	0.	0.	0.	0.
8 AIRPORT MAINTENANCE BUILDING(SF)	0.00	0.	0.	0.	0.
9 FIRE & EMERGENCY EQUIPMENT BUILDING(SF)	79.46	2464.	0.	0.	0.
10 NUMBER OF FIRE AND RESCUE VEHICLES	82.00	7740.	0.	0.	0.
11 GA TERMINAL BUILDING AREA(SF)	0.00	23250.	5500.	8250.	6875.
12 GA AIRCRAFT LOADING POSITIONS(NUMBER)	0.00	0.	0.	0.	0.
13 GA AC LOADING & BYPASS APRON AREA(SY)	79.46	0.	0.	0.	0.
14 ITINERANT AIRCRAFT PARKING AREA(SY)	79.46	1460.	314.	628.	314.
15 GA BASED AIRCRAFT TIE-DOWN AREA(SY)	79.46	0.	0.	0.	0.
16 GA CONV HANGAR BLDG AND APRON AREA(SY)	79.46	0.	0.	0.	0.
17 GA *T* HANGAR BLDG & APRON AREA(SY)	79.46	10575.	571.	286.	286.
18 GA PUBLIC VEHICULAR PARKING SPACE(NO.)	0.00	0.	0.	0.	0.
19 GA PUBLIC VEHICULAR PARKING AREA(SY)	0.00	30555.	4158.	6237.	5198.
20 AIRPORT MAINTENANCE APRON AREA(SY)	79.46	595.	98.	83.	99.
21 AIRPORT MAINTENANCE BUILDING(SF)	0.00	805.	133.	113.	134.
TOTAL IN THOUSANDS OF DOLLARS		77.7	21.2	51.0	50.3

MISSOULA

The city of Missoula is situated in the mountains and the Lolo National Forest area of western Montana. The Blackfoot River flows through the north section of the city. Land transportation to the northwest and southeast is provided by Interstate 90. U. S. Route 93 also provides access south and north into the Flathead Indian Reservation 16 miles away. The Amtrack system provides passenger service on its Chicago-Seattle run three days a week. The closest towns in Montana served from Missoula are Deer Lodge and Paradise.

Johnson-Bell Field is three miles northwest of Missoula off U. S. 93. The dominant air carrier aircraft is of type 'B'. This will be true throughout the forecast period although some 'A' type aircraft will occur in 1992. Restrictive zoning should be considered to insure community developments compatible with the airport.

Facility Requirements

The recommendations shown in the cost table are from the current Missoula Master plan with the exception of the parallel GA runway.

By 1982, the present runway layout will not be able to handle the total peak hour VFR demand. Therefore, it is recommended that a short general aviation runway, parallel to runway 11-29, be constructed for implementation by 1982. The parallel runway layout should be able to handle the peak hour VFR demand through the 1992 period, provided that adequate parallel taxiways are available. It is recommended that a parallel taxiway for runway 11/29 be started immediately in order to handle the traffic loads forecasted for 1977.

The MSASP departs from the current Missoula Master plan regarding the problem of the ILS to runway 11.

IFR traffic operations are handicapped by the lack of a suitable missed approach procedure. The Present ILS minima are extremely high, (1000/1) due to obstructions on the missed approach. A considerable reduction in weather minima would be possible for certain aircraft if the FAA would adopt the philosophy of taking the performance of the specific type of aircraft into account when setting minima at problem locations. For example, the Boeing B-727-200 can make good a climbing gradient of more than 7% (15 to 1), but its minima are still dictated by the 40:1 missed approach obstacle clearance surface. Tower minima based on the recognized climb performance of the B-727 could be authorized for specific operators in their operations specifications. This has been done at other locations by the FAA; for example, at Aspen, Colorado for Rocky Mountain Airways Twin Otter 300 series aircraft. Our analysis of the missed approach paths for Missoula would indicate that a Boeing 727-200 should be allowed to descend to ILS minimums of 200 and 3/4, if the FAA elects to allow for the extremely good climb rate of this aircraft, in

executing a missed approach. The reduction of the present ILS minima, gained thereby, should greatly increase the reliability of airline service to Missoula, particularly during the winter months.

The forecasted IFR peak hour demand for Missoula can be accommodated with the present number of runways, if a straight-out missed approach path can be established for a holding fix south of the airport, or if an airport surveillance radar can be implemented for Missoula.

A considerable amount of terminal space should be added in the first five years and then an equal amount should be incremented by the end of the next fifteen years. It is recommended that the terminal area be relocated within the present airport boundary to provide space for terminal expansion and upgrading of runway 16-34.

Name: MISSOULA

Site Number: 12453

County: MISSOULA

District: 11

PEAK HOUR IFR AND VFR DEMAND FORECASTS

MISSOULA, MONTANA	1977	1982	1987	1992
TOTAL PEAK HOUR VFR DEMAND	111.	123.	140.	158.
GA IFR PEAK HOUR DEMAND	9.	13.	17.	23.
AC AND GA IFR PH DEMAND	15.	20.	25.	31.

OPERATIONAL DATA

DEMAND FORECAST INDICATORS

	1977	1982	1987	1992
1 AIR CARRIER PEAK HOUR PASSENGERS	199.0	250.0	280.0	313.0
2 TOTAL AIR CARRIER ANNUAL OPERATIONS	7876.0	9888.0	11610.0	13500.0
3 AIR CARRIER PEAK HOUR OPERATIONS	6.0	7.0	8.0	8.0
4 AIR CARRIER AVERAGE TURN-AROUND TIME	20.0	22.0	24.0	25.0
5 ANNUAL AIR CARGO(FR+ EX+ MAIL)	270.0	413.0	627.0	964.0
6 PERCENT OF AIRCRAFT TYPE=X=	0.0	0.0	0.0	0.0
7 PERCENT OF AIRCRAFT TYPE=J=	0.0	0.0	0.0	0.0
8 PERCENT OF AIRCRAFT TYPE=L=	67.0	67.0	67.0	67.0
9 PERCENT OF AIRCRAFT TYPE=M=	3.0	6.0	9.0	13.0
10 PERCENT OF AIRCRAFT TYPE=S AND T=	31.0	27.0	24.0	20.0
11 TOTAL GA ANNUAL OPERATIONS	103400.0	115580.0	132100.0	149000.0
12 GA PEAK HOUR OPERATIONS	105.0	116.0	132.0	150.0
13 PERCENT GA ITINERANT OPERATIONS	50.0	52.0	53.0	54.0
14 BASED AIRCRAFT UNDER 12500 LBS	167.0	184.0	211.0	239.0
15 BASED AIRCRAFT OVER 12500 LBS	3.0	4.0	4.0	5.0

AIRCRAFT MIX AND CAPACITY FORECASTS

	1972	1977	1982	1987	1992
AIRCRAFT TYPE =A=	0	0	0	0	4
AIRCRAFT TYPE =B=	5	11	17	22	24
AIRCRAFT TYPE =C=	0	3	5	7	12
AIRCRAFT TYPE =D+E=	95	86	78	71	60
HOURLY CAPACITY VFR	105	115	125	125	125
HOURLY CAPACITY IFR	15	16	17	17	17
ANNUAL CAPACITY(000)	146	167	200	220	260

DEVELOPMENT COST SUMMARY

PLAN PERIOD	PARTICIPATION	LAND SIDE	AIR SIDE	TOTAL
BEFORE 1977	FEDERAL	$	$ 1,264,000	$ 1,264,000
	STATE/LOCAL	1,550,000	327,000	1,877,000
	TOTAL	1,550,000	1,591,000	3,141,000
1977	FEDERAL		918,000	918,000
	STATE/LOCAL	270,000	237,000	507,000
	TOTAL	270,000	1,155,000	1,425,000
1982	FEDERAL		2,965,000	2,965,000
	STATE/LOCAL	25,000	767,000	792,000
	TOTAL	25,000	3,732,000	3,757,000
1987	FEDERAL			
	STATE/LOCAL			
	TOTAL			
1992	FEDERAL			
	STATE/LOCAL			
	TOTAL			
TOTAL COSTS TO 1992	FEDERAL		5,147,000	5,147,000
	STATE/LOCAL	1,845,000	1,331,000	3,176,000
	TOTAL	1,845,000	6,478,000	8,323,000

MISSOULA

MSASP AIRFIELD DEVELOPMENT COSTS IN THOUSANDS OF 1972 DOLLARS

MISSOULA-AIRS + LAND

		FED SHARE	TOTAL	FED GRANTS	STATE/LOCAL
	BEFORE 1977				
1	TERMINAL AREA DEVELOPMNT				
	BUILDING EXP.+ RENOV.	0.00	1550.00	0.00	1550.00
2	LANDING AREA DEVELOPMENT				
A	RECON. RW(7/25)	79.46	105.00	83.43	21.96
B	PARA. TW- RW(11/29)	79.46	1104.00	877.23	226.76
C	EXT. TERM. APRON (G-3)	79.46	166.00	131.90	34.09
3	ACQUIRE LAND FOR CLEAR ZONES	79.46	215.00	170.83	44.16
	TOTAL ($000)		3140.02	1263.43	1876.81
	1977				
4	TERMINAL AREA DEVELOPMNT				
A	REALGN ACCESS RD + PARKN	0.00	40.00	0.00	40.00
B	STORM SEWER IMPROVEMENT	0.00	190.00	0.00	190.00
5	LANDING AREA DEVELOPMENT				
A	PARA. TW TO TW B-2 +EXIT	79.46	750.00	595.94	154.05
B	OVERLAY TW B-3	79.46	95.00	75.48	19.51
C	MIRL RW'S 7/25 + 16/34	79.46	210.00	166.86	43.13
D	CONSTR. ITIN PARKING RMP	79.46	80.00	63.56	16.43
E	RELOCATE WIND CONE	79.46	20.00	15.89	4.10
6	NEW FBO AREA DEVEL.				
A	SERVICE ROAD	0.00	40.00	0.00	40.00
	TOTAL ($000)		1425.03	917.80	507.27
	1982				
7	TERMINAL AREA DEVELOPMNT				
A	NEW E. PARKING LOT	0.00	25.00	0.00	25.00
8	LANDING AREA DEVELOPMENT				
A	EXT TERM. APRON (G-4)	79.46	640.00	508.54	131.45
B	PARA. TW'S RW7 + RW 16	79.46	580.00	460.86	119.13
C	CONN. TW	79.46	290.00	230.43	59.56
D	OVERLAY RW'S, TW'S +APNS	79.46	920.00	731.03	188.96
E	PARA TW TO TW B-3	79.46	900.00	715.14	184.86
F	RELOC. FAA TRANSMITTER	79.46	55.00	43.70	11.29
G	G.A. PARA RW(11/29)	79.46	346.74	275.51	71.22
	TOTAL ($000)		3756.77	2965.27	791.53
	TOTAL PROJECT COSTS		8321.84	5146.51	3175.42

DEMOLITION
CONSTRUCTION
LAND

SIDNEY

Sidney is in east Montana, 2 miles west of the Yellowstone River and 6 miles west of North Dakota. State Route 200 gives access northeast to North Dakota and west. State Route 16 provides land transportation north, and south along the Yellowstone River.

The Sidney-Richland Municipal Airport is 1 mile west of town off State Route 16. Present and future type aircraft will be of types 'C' and 'D & E'.

Facility Requirements

The total peak hour demands can be handled on the present runway layout. The present NDB provides straight in and circling minima which require a 1100 foot ceiling and 1 1/2 to 2 mile visibility, therefore a VOR and a VASI unit should be added.

The principal expense will be that of overlay for runway (10-28). Before the very costly runway reconstruction is begun, a detailed master plan and/or site feasibility study should be completed.

Name: SIDNEY

Site Number: 12503

County: RICHLAND

District: 2

PEAK HOUR IFR AND VFR DEMAND FORECASTS

SIDNEY, MONTANA	1977	1982	1987	1992
TOTAL PEAK HOUR VFR DEMAND	18.	19.	20.	20.
GA IFR PEAK HOUR DEMAND	1.	2.	2.	3.
AC AND GA IFR PH DEMAND	3.	4.	4.	5.

OPERATIONAL DATA

DEMAND FORECAST INDICATORS	1977	1982	1987	1992
1 AIR CARRIER PEAK HOUR PASSENGERS	3.0	6.0	7.0	10.0
2 TOTAL AIR CARRIER ANNUAL OPERATIONS	820.0	870.0	890.0	900.0
3 AIR CARRIER PEAK HOUR OPERATIONS	2.0	2.0	2.0	2.0
4 AIR CARRIER AVERAGE TURN-AROUND TIME	10.0	12.0	14.0	16.0
5 ANNUAL AIR CARGO(FR+ EX+ MAIL)	26.0	46.0	80.0	148.0
6 PERCENT OF AIRCRAFT TYPE=X*	0.0	0.0	0.0	0.0
7 PERCENT OF AIRCRAFT TYPE=X-1*	0.0	0.0	0.0	0.0
8 PERCENT OF AIRCRAFT TYPE=L*	0.0	0.0	0.0	0.0
9 PERCENT OF AIRCRAFT TYPE=M*	0.0	3.0	7.0	10.0
10 PERCENT OF AIRCRAFT TYPE=S AND T*	100.0	97.0	93.0	90.0
11 TOTAL GA ANNUAL OPERATIONS	8100.0	8400.0	8700.0	9000.0
12 GA PEAK HOUR OPERATIONS	16.0	17.0	18.0	18.0
13 PERCENT GA ITINERANT OPERATIONS	39.0	37.0	39.0	40.0
14 BASED AIRCRAFT UNDER 12500 LBS	11.0	13.0	15.0	17.0
15 BASED AIRCRAFT OVER 12500 LBS	0.0	0.0	0.0	0.0

AIRCRAFT MIX AND CAPACITY FORECASTS

	1972	1977	1982	1987	1992
AIRCRAFT TYPE *A*	0	0	0	0	0
AIRCRAFT TYPE *B*	0	0	0	3	10
AIRCRAFT TYPE *C*	9	16	22	25	24
AIRCRAFT TYPE *D+F*	91	84	78	72	66
HOURLY CAPACITY VFR	80	82	83	82	80
HOURLY CAPACITY IFR	53	53	52	52	52
ANNUAL CAPACITY(000)	111	122	133	142	152

DEVELOPMENT COST SUMMARY

PLAN PERIOD	PARTICIPATION	LAND SIDE	AIR SIDE	TOTAL
BEFORE 1977	FEDERAL	$	$ 221,000	$ 221,000
	STATE/LOCAL		46,000	46,000
	TOTAL		267,000	267,000
1977	FEDERAL	51,000		51,000
	STATE/LOCAL	51,000		51,000
	TOTAL	102,000		102,000
1982	FEDERAL	1,000		1,000
	STATE/LOCAL	17,000		17,000
	TOTAL	18,000		18,000
1987	FEDERAL	2,000		2,000
	STATE/LOCAL	17,000		17,000
	TOTAL	19,000		19,000
1992	FEDERAL	1,000		1,000
	STATE/LOCAL	22,000		22,000
	TOTAL	23,000		23,000
TOTAL COSTS TO 1992	FEDERAL	55,000	221,000	276,000
	STATE/LOCAL	107,000	46,000	153,000
	TOTAL	162,000	267,000	429,000

SIDNEY

MSASP AIRFIELD DEVELOPMENT COSTS IN THOUSANDS OF 1972 DOLLARS

SIDNEY

		FED SHARE	TOTAL	FED GRANTS	STATE/LOCAL
	BEFORE 1977				
1	TAXIWAY TURNAROUND	79.46	1.50	1.19	0.30
2	36" BEACON	79.46	5.00	3.97	1.02
3	OVERLAY RUNWAY (10/28)	79.46	200.00	158.91	41.08
4	VASI	79.46	15.00	11.91	3.08
5	VOR	100.00	45.00	45.00	0.00
	TOTAL ($000)		266.52	221.02	45.52
	TOTAL PROJECT COSTS		266.52	221.02	45.52

FEDERAL SHARE OF THE PROJECT COSTS

	FED SHARE	1977	1982	1987	1992
1 AIR CARRIER TERMINAL AREA(SF)	0.00	0.	0.	0.	0.
2 AIR CARRIER CARGO TERMINAL AREA(SF)	0.00	0.	0.	0.	0.
3 AIRLINE AC LOADING POSITIONS(NO.)	0.00	0.	0.	0.	0.
4 AC LOADING & BYPASS APRON AREAS(SY)	79.46	0.	0.	0.	0.
5 AC PUBLIC AUTO PARKING SPACES(NO.)	0.00	0.	0.	0.	0.
6 AC PUBLIC AUTO PARKING AREAS(SY)	0.00	0.	0.	0.	0.
7 AIRPORT MAINTENANCE APRON AREA (SY)	79.46	1914.	75.	69.	66.
8 AIRPORT MAINTENANCE BUILDING(SF)	0.00	0.	0.	0.	0.
9 FIRE & EMERGENCY EQUIPMENT BUILDING(SF)	79.46	9535.	0.	0.	0.
10 NUMBER OF FIRE AND RESCUE VEHICLES	82.00	35260.	0.	0.	0.
11 GA TERMINAL BUILDING AREA(SF)	0.00	0.	0.	0.	0.
12 GA AIRCRAFT LOADING POSITIONS(NUMBER)	0.00	0.	0.	0.	0.
13 GA AC LOADING & BYPASS APRON AREA(SY)	79.46	2403.	0.	810.	0.
14 ITINERANT AIRCRAFT PARKING AREA(SY)	79.46	0.	0.	0.	0.
15 GA BASED AIRCRAFT TIE-DOWN AREA(SY)	79.46	0.	658.	834.	834.
16 GA CONV HANGAR BLDG AND APRON AREA(SY)	79.46	1783.	324.	324.	324.
17 GA *T* HANGAR BLDG & APRON AREA(SY)	79.46	0.	0.	0.	0.
18 GA PUBLIC VEHICULAR PARKING SPACE(NO.)	0.00	0.	0.	0.	0.
19 GA PUBLIC VEHICULAR PARKING AREA(SY)	0.00	0.	0.	0.	0.
20 AIRPORT MAINTENANCE APRON AREA(SY)	79.46	0.	0.	0.	0.
21 AIRPORT MAINTENANCE BUILDING(SF)	0.00	0.	0.	0.	0.
TOTAL IN THOUSANDS OF DOLLARS		50.9	1.1	2.0	1.2

PROJECT COST LESS FEDERAL GRANTS

	FED SHARE	1977	1982	1987	1992
1 AIR CARRIER TERMINAL AREA(SF)	0.00	0.	13500.	13800.	20700.
2 AIR CARRIER CARGO TERMINAL AREA(SF)	0.00	143.	110.	220.	342.
3 AIRLINE AC LOADING POSITIONS(NO.)	0.00	0.	0.	0.	0.
4 AC LOADING & BYPASS APRON AREAS(SY)	79.46	0.	0.	0.	0.
5 AC PUBLIC AUTO PARKING SPACES(NO.)	0.00	0.	0.	0.	0.
6 AC PUBLIC AUTO PARKING AREAS(SY)	0.00	0.	0.	0.	0.
7 AIRPORT MAINTENANCE APRON AREA (SY)	79.46	494.	19.	17.	17.
8 AIRPORT MAINTENANCE BUILDING(SF)	0.00	1070.	42.	38.	37.
9 FIRE & EMERGENCY EQUIPMENT BUILDING(SF)	79.46	2464.	0.	0.	0.
10 NUMBER OF FIRE AND RESCUE VEHICLES	82.00	7740.	0.	0.	0.
11 GA TERMINAL BUILDING AREA(SF)	0.00	19000.	1125.	1125.	0.
12 GA AIRCRAFT LOADING POSITIONS(NUMBER)	0.00	0.	0.	0.	0.
13 GA AC LOADING & BYPASS APRON AREA(SY)	79.46	621.	0.	209.	0.
14 ITINERANT AIRCRAFT PARKING AREA(SY)	79.46	0.	0.	0.	0.
15 GA BASED AIRCRAFT TIE-DOWN AREA(SY)	79.46	0.	170.	215.	215.
16 GA CONV HANGAR BLDG AND APRON AREA(SY)	79.46	2705.	492.	492.	492.
17 GA *T* HANGAR BLDG & APRON AREA(SY)	79.46	0.	0.	0.	0.
18 GA PUBLIC VEHICULAR PARKING SPACE(NO.)	0.00	0.	0.	0.	0.
19 GA PUBLIC VEHICULAR PARKING AREA(SY)	0.00	16452.	1039.	1040.	0.
20 AIRPORT MAINTENANCE APRON AREA(SY)	79.46	0.	0.	0.	0.
21 AIRPORT MAINTENANCE BUILDING(SF)	0.00	446.	18.	16.	15.
TOTAL IN THOUSANDS OF DOLLARS		51.1	16.5	17.2	21.8

LANDSIDE

WEST YELLOWSTONE

The town of West Yellowstone is situated in the Beaverhead National Forest of southwest Montana. The east side of town borders the Yellowstone National Park and Wyoming is 3 miles into the park. The Idaho border is 10 miles to the west on U. S. 20 and 191. Hebgen Lake is 5 miles north on U. S. 287 and 191.

The Yellowstone Airport is 2 miles north of town off U. S. 287 and 191. A good size fleet of 'B' type aircraft are presently using this facility. 'A' type aircraft are expected to operate beginning in 1982, and will increase throughout the forecast period. A noise disturbance within the park area may result as air activity increases and restrictive zoning should be considered to insure community developments compatible with the airport.

In the past, West Yellowstone has been closed through the winter months, however, with the ever increasing winter tourist activity of the area (especially the Big Sky recreation complex) it is expected that within the next 10 years the demand may support year around operation.

Facility Requirements

The total peak hour VFR traffic demand can be accommodated with the present facilities, up to the end of the forecast period. The present minima are 1800/2; however, the authorities programmed an ILS system for the year 1975. This should radically improve the IFR conditions for the airport.

The increase in type 'A' aircraft will necessitate extending runway 1-19 as indicated in the "development costs" tables. Runway and taxiway paving are the major costs items to be encountered on the airfield side.

The terminal area will require an increment of fire fighting equipment and public parking before 1982. Thereafter, over one-half million dollars in terminal construction should be considered.

Name: WEST YELLOWSTONE

Site Number: 12549.1

County: GALLATIN

District: 9

PEAK HOUR IFR AND VFR DEMAND FORECASTS

	1977	1982	1987	1992
WEST YELLOWSTONE,MONTANA				
TOTAL PEAK HOUR VFR DEMAND	13.	17.	20.	27.
GA IFR PEAK HOUR DEMAND	1.	1.	2.	3.
AC AND GA IFR PH DEMAND	4.	5.	7.	10.

OPERATIONAL DATA

DEMAND FORECAST INDICATORS	1977	1982	1987	1992
1 AIR CARRIER PEAK HOUR PASSENGERS	37.0	82.0	101.0	134.0
2 TOTAL AIR CARRIER ANNUAL OPERATIONS	2800.0	4112.0	6286.0	9780.0
3 AIR CARRIER PEAK HOUR OPERATIONS	3.0	4.0	5.0	7.0
4 AIR CARRIER AVERAGE TURN-AROUND TIME	16.0	18.0	20.0	22.0
5 ANNUAL AIR CARGO(FR* EX* MAIL)	29.0	113.0	274.0	399.0
6 PERCENT OF AIRCRAFT TYPE*X*	0.0	0.0	0.0	0.0
7 PERCENT OF AIRCRAFT TYPE*X-1*	0.0	0.0	0.0	0.0
8 PERCENT OF AIRCRAFT TYPE*L*	0.0	8.0	17.0	28.0
9 PERCENT OF AIRCRAFT TYPE*M*	90.0	82.0	73.0	62.0
10 PERCENT OF AIRCRAFT TYPE*S AND T*	10.0	10.0	10.0	10.0
11 TOTAL GA ANNUAL OPERATIONS	5880.0	6240.0	7060.0	8000.0
12 GA PEAK HOUR OPERATIONS	10.0	13.0	15.0	20.0
13 PERCENT GA (ITINERANT OPERATIONS	80.0	85.0	85.0	85.0
14 BASED AIRCRAFT UNDER 12500 LBS	8.0	9.0	10.0	12.0
15 BASED AIRCRAFT OVER 12500 LBS	0.0	0.0	0.0	0.0

AIRCRAFT MIX AND CAPACITY FORECASTS

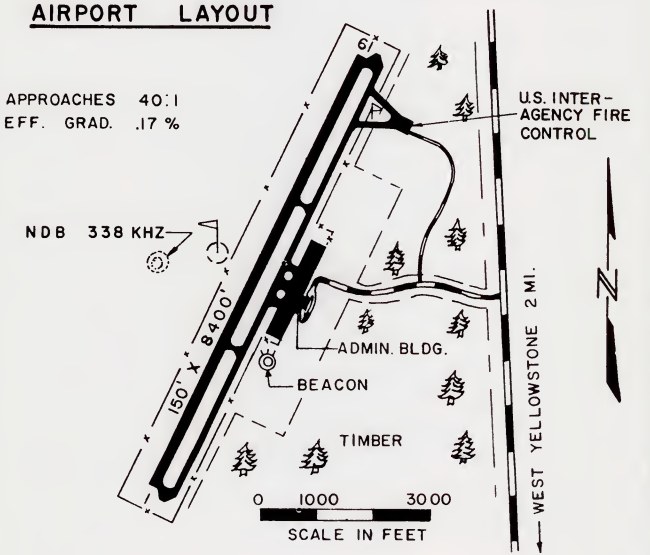
	1972	1977	1982	1987	1992
AIRCRAFT TYPE *A*	0	0	3	9	16
AIRCRAFT TYPE *B*	32	37	40	39	38
AIRCRAFT TYPE *C*	0	0	0	0	0
AIRCRAFT TYPE *D+E*	68	63	57	52	46
HOURLY CAPACITY VFR	69	72	76	68	60
HOURLY CAPACITY IFR	9	9	9	9	9
ANNUAL CAPACITY(000)	127	143	167	163	157

DEVELOPMENT COST SUMMARY

PLAN PERIOD	PARTICIPATION	LAND SIDE	AIR SIDE	TOTAL
BEFORE 1977	FEDERAL	$	$ 1,162,000	$ 1,162,000
	STATE/LOCAL		212,000	212,000
	TOTAL		1,374,000	1,374,000
1977	FEDERAL	56,000		56,000
	STATE/LOCAL	42,000		42,000
	TOTAL	98,000		98,000
1982	FEDERAL	1,000		1,000
	STATE/LOCAL	19,000		19,000
	TOTAL	20,000		20,000
1987	FEDERAL	1,000		1,000
	STATE/LOCAL	241,000		241,000
	TOTAL	242,000		242,000
1992	FEDERAL	3,000		3,000
	STATE/LOCAL	246,000		246,000
	TOTAL	249,000		249,000
TOTAL COSTS TO 1992	FEDERAL	61,000	1,162,000	1,223,000
	STATE/LOCAL	548,000	212,000	760,000
	TOTAL	609,000	1,374,000	1,983,000

WEST YELLOWSTONE

AIRPORT LAYOUT



MSASP AIRFIELD DEVELOPMENT COSTS IN THOUSANDS OF 1972 DOLLARS

WEST YELLOWSTONE

LANDSIDE

			FED SHARE	TOTAL	FED GRANTS	STATE/LOCAL
		BEFORE 1977				
1	EXTEND RW (1-19)					
	A	EARTHWORK	79.46	27.00	21.45	5.54
	B	EASEMENTS	79.46	10.00	7.94	2.05
	C	SITE PREPARATION	79.46	8.80	6.99	1.80
	D	OBSTRUCTIONS	79.46	1.00	0.79	0.20
	E	DRAINAGE	79.46	7.00	5.56	1.43
	F	PAVING	79.46	670.00	532.38	137.61
2	ADD TAXIWAYS					
	A	EARTHWORK	79.46	10.00	7.94	2.05
	B	PAVING	79.46	300.00	238.37	61.62
3	ILS		100.00	340.00	340.00	0.00
	TOTAL ($000)			1373.84	1161.50	212.38
	TOTAL PROJECT COSTS			1373.84	1161.50	212.38

FEDERAL SHARE OF THE PROJECT COSTS

	FED SHARE	1977	1982	1987	1992
1 AIR CARRIER TERMINAL AREA(SF)	0.00	0.	0.	0.	0.
2 AIR CARRIER CARGO TERMINAL AREA(SF)	0.00	0.	0.	0.	0.
3 AIRLINE AC LOADING POSITIONS(NO.)	0.00	0.	0.	0.	0.
4 AC LOADING & BYPASS APRON AREAS(SY)	79.46	0.	0.	0.	0.
5 AC PUBLIC AUTO PARKING SPACES(NO.)	0.00	0.	0.	0.	0.
6 AC PUBLIC AUTO PARKING AREAS(SY)	0.00	0.	0.	0.	0.
7 AIRPORT MAINTENANCE APRON AREA (SY)	79.46	0.	0.	0.	590.
8 AIRPORT MAINTENANCE BUILDING(SF)	0.00	0.	0.	0.	0.
9 FIRE & EMERGENCY EQUIPMENT BUILDING(SF)	79.46	14303.	0.	0.	0.
10 NUMBER OF FIRE AND RESCUE VEHICLES	82.00	35260.	0.	0.	0.
11 GA TERMINAL BUILDING AREA(SF)	0.00	0.	0.	0.	0.
12 GA AIRCRAFT LOADING POSITIONS(NUMBER)	0.00	0.	0.	0.	0.
13 GA AC LOADING & BYPASS APRON AREA(SY)	79.46	0.	0.	0.	0.
14 ITINERANT AIRCRAFT PARKING AREA(SY)	79.46	0.	0.	0.	0.
15 GA BASED AIRCRAFT TIE-DOWN AREA(SY)	79.46	1433.	417.	417.	834.
16 GA CONV HANGAR BLDG AND APRON AREA(SY)	79.46	1296.	162.	162.	324.
17 GA +T+ HANGAR BLDG & APRON AREA(SY)	79.46	2575.	322.	322.	644.
18 GA PUBLIC VEHICULAR PARKING SPACE(NO.)	0.00	0.	0.	0.	0.
19 GA PUBLIC VEHICULAR PARKING AREA(SY)	0.00	0.	0.	0.	0.
20 AIRPORT MAINTENANCE APRON AREA(SY)	79.46	1241.	239.	428.	630.
21 AIRPORT MAINTENANCE BUILDING(SF)	0.00	0.	0.	0.	0.
TOTAL IN THOUSANDS OF DOLLARS		56.0	1.2	1.3	3.0

PROJECT COST LESS FEDERAL GRANTS

	FED SHARE	1977	1982	1987	1992
1 AIR CARRIER TERMINAL AREA(SF)	0.00	0.	0.	216600.	217800.
2 AIR CARRIER CARGO TERMINAL AREA(SF)	0.00	160.	463.	887.	689.
3 AIRLINE AC LOADING POSITIONS(NO.)	0.00	0.	0.	0.	0.
4 AC LOADING & BYPASS APRON AREAS(SY)	79.46	0.	0.	0.	0.
5 AC PUBLIC AUTO PARKING SPACES(NO.)	0.00	0.	0.	0.	0.
6 AC PUBLIC AUTO PARKING AREAS(SY)	0.00	13494.	11550.	18018.	15246.
7 AIRPORT MAINTENANCE APRON AREA (SY)	79.46	0.	0.	0.	152.
8 AIRPORT MAINTENANCE BUILDING(SF)	0.00	0.	0.	0.	0.
9 FIRE & EMERGENCY EQUIPMENT BUILDING(SF)	79.46	3697.	0.	0.	0.
10 NUMBER OF FIRE AND RESCUE VEHICLES	82.00	7740.	0.	0.	0.
11 GA TERMINAL BUILDING AREA(SF)	0.00	2250.	3375.	2250.	5625.
12 GA AIRCRAFT LOADING POSITIONS(NUMBER)	0.00	0.	0.	0.	0.
13 GA AC LOADING & BYPASS APRON AREA(SY)	79.46	0.	0.	0.	0.
14 ITINERANT AIRCRAFT PARKING AREA(SY)	79.46	0.	0.	0.	0.
15 GA BASED AIRCRAFT TIE-DOWN AREA(SY)	79.46	370.	107.	107.	215.
16 GA CONV HANGAR BLDG AND APRON AREA(SY)	79.46	1967.	246.	246.	492.
17 GA +T+ HANGAR BLDG & APRON AREA(SY)	79.46	2286.	286.	286.	571.
18 GA PUBLIC VEHICULAR PARKING SPACE(NO.)	0.00	0.	0.	0.	0.
19 GA PUBLIC VEHICULAR PARKING AREA(SY)	0.00	9495.	3119.	20799.	5197.
20 AIRPORT MAINTENANCE APRON AREA(SY)	79.46	321.	61.	110.	162.
21 AIRPORT MAINTENANCE BUILDING(SF)	0.00	434.	84.	150.	220.
TOTAL IN THOUSANDS OF DOLLARS		42.4	19.3	240.7	246.4

WOLF POINT

The city of Wolf Point is situated in northeast Montana within the Fort Peck Indian Reservation. The Missouri River is about 1 mile to the south of the city. U. S. Route 2 provides access through the city to the east and west. State Route 13 serves the north and south. Amtrak provides daily passenger service between Williston, N. D. and Glasgow.

Wolf Point International is located 2 miles east of town off State Route 13. The Missouri River passes just south of the airport. Present and future activity will be mainly composed of aircraft type 'C' and 'D & E'. The increase in activity should not cause any problem to the environment.

Facility Requirements

The present runway/taxiway system and the existing state owned NDB will be adequate to meet all VFR and IFR demands through the forecast period.

The landing strip should be widened to provide adequate space for operations and for safety reasons. Major terminal area work before 1977 includes: Fire and rescue equipment, building, aircraft loading apron and some general aviation buildings.

Air carrier terminal additions will be the major cost items after 1977.

Name: WOLF POINT

Site Number: 12573

County: ROOSEVELT

District: 1

PEAK HOUR IFR AND VFR DEMAND FORECASTS

WOLF POINT, MONTANA	1977	1982	1987	1992
TOTAL PEAK HOUR VFR DEMAND	15.	16.	17.	18.
GA IFR PEAK HOUR DEMAND	1.	2.	2.	2.
AC AND GA IFR PH DEMAND	3.	4.	4.	4.

OPERATIONAL DATA

DEMAND FORECAST INDICATORS

	1977	1982	1987	1992
1 AIR CARRIER PEAK HOUR PASSENGERS	3.0	5.0	7.0	8.0
2 TOTAL AIR CARRIER ANNUAL OPERATIONS	900.0	1166.0	1334.0	1542.0
3 AIR CARRIER PEAK HOUR OPERATIONS	2.0	2.0	2.0	2.0
4 AIR CARRIER AVERAGE TURN-AROUND TIME	7.0	9.0	10.0	11.0
5 ANNUAL AIR CARGO(FR+ EX+ MAIL)	24.0	40.0	68.0	114.0
6 PERCENT OF AIRCRAFT TYPE=A=	0.0	0.0	0.0	0.0
7 PERCENT OF AIRCRAFT TYPE=B=-1=	0.0	0.0	0.0	0.0
8 PERCENT OF AIRCRAFT TYPE=L=	0.0	0.0	0.0	0.0
9 PERCENT OF AIRCRAFT TYPE=M=	0.0	3.0	7.0	10.0
10 PERCENT OF AIRCRAFT TYPE=S AND T=	100.0	97.0	93.0	90.0
11 TOTAL GA ANNUAL OPERATIONS	6000.0	6300.0	6700.0	7140.0
12 GA PEAK HOUR OPERATIONS	13.0	14.0	15.0	16.0
13 PERCENT GA ITINERANT OPERATIONS	30.0	32.0	33.0	33.0
14 BASED AIRCRAFT UNDER 12500 LBS	7.0	8.0	9.0	10.0
15 BASED AIRCRAFT OVER 12500 LBS	0.0	0.0	0.0	0.0

AIRCRAFT MIX AND CAPACITY FORECASTS

	1972	1977	1982	1987	1992
AIRCRAFT TYPE =A=	0	0	0	0	0
AIRCRAFT TYPE =B=	0	0	0	9	17
AIRCRAFT TYPE =C=	13	29	32	30	29
AIRCRAFT TYPE =D=E=	87	75	68	61	54
HOURLY CAPACITY VFR	74	86	99	90	82
HOURLY CAPACITY IFR	0	52	52	52	52
ANNUAL CAPACITY(000)	106	143	182	184	190

DEVELOPMENT COST SUMMARY

PLAN PERIOD	PARTICIPATION	LAND SIDE	AIR SIDE	TOTAL
BEFORE 1977	FEDERAL	$	$ 39,000	$ 39,000
	STATE/LOCAL		10,000	10,000
	TOTAL		49,000	49,000
1977	FEDERAL	65,000		65,000
	STATE/LOCAL	34,000		34,000
	TOTAL	99,000		99,000
1982	FEDERAL	1,000		1,000
	STATE/LOCAL	16,000		16,000
	TOTAL	17,000		17,000
1987	FEDERAL	1,000	77,000	78,000
	STATE/LOCAL	17,000	20,000	37,000
	TOTAL	18,000	97,000	115,000
1992	FEDERAL	1,000		1,000
	STATE/LOCAL	10,000		10,000
	TOTAL	11,000		11,000
TOTAL COSTS TO 1992	FEDERAL	68,000	116,000	184,000
	STATE/LOCAL	77,000	30,000	107,000
	TOTAL	145,000	146,000	291,000

WOLF POINT

MSASP AIRFIELD DEVELOPMENT COSTS IN THOUSANDS OF 1972 DOLLARS

WOLF POINT

	FED SHARE	TOTAL	FED GRANTS	STATE/LOCAL
BEFORE 1977				
1 WIDEN LANDING STRIP				
A EARTHWORK	79.46	48.00	38.14	9.85
B LAND ACQUISITION	79.46	1.20	0.95	0.24
TOTAL ($000)		49.20	39.10	10.11
1987				
2 RUNWAY OVERLAY	79.46	97.00	77.07	19.92
TOTAL ($000)		97.00	77.08	19.92
TOTAL PROJECT COSTS		146.21	116.18	30.04

AIRSIDE

FEDERAL SHARE OF THE PROJECT COSTS

	FED SHARE	1977	1982	1987	1992
1 AIR CARRIER TERMINAL AREA(SF)	0.00	0.	0.	0.	0.
2 AIR CARRIER CARGO TERMINAL AREA(SF)	0.00	0.	0.	0.	0.
3 AIRLINE AC LOADING POSITIONS(NO.)	0.00	0.	0.	0.	0.
4 AC LOADING & BYPASS APRON AREAS(SY)	79.46	14303.	214.	286.	214.
5 AC PUBLIC AUTO PARKING SPACES(NO.)	0.00	0.	0.	0.	0.
6 AC PUBLIC AUTO PARKING AREAS(SY)	0.00	0.	0.	0.	0.
7 AIRPORT MAINTENANCE APRON AREA (SY)	79.46	1480.	121.	122.	139.
8 AIRPORT MAINTENANCE BUILDING(SF)	0.00	0.	0.	0.	0.
9 FIRE & EMERGENCY EQUIPMENT BUILDING(SF)	79.46	9535.	0.	0.	0.
10 NUMBER OF FIRE AND RESCUE VEHICLES	82.00	35260.	0.	0.	0.
11 GA TERMINAL BUILDING AREA(SF)	0.00	0.	0.	0.	0.
12 GA AIRCRAFT LOADING POSITIONS(NUMBER)	0.00	0.	0.	0.	0.
13 GA AC LOADING & BYPASS APRON AREA(SY)	79.46	0.	0.	0.	0.
14 ITINERANT AIRCRAFT PARKING AREA(SY)	79.46	0.	0.	0.	548.
15 GA BASED AIRCRAFT TIE-DOWN AREA(SY)	79.46	2922.	417.	417.	417.
16 GA CONV HANGAR BLDG AND APRON AREA(SY)	79.46	0.	0.	0.	0.
17 GA *T* HANGAR BLDG & APRON AREA(SY)	79.46	0.	0.	0.	0.
18 GA PUBLIC VEHICULAR PARKING SPACE(NO.)	0.00	0.	0.	0.	0.
19 GA PUBLIC VEHICULAR PARKING AREA(SY)	0.00	0.	0.	0.	0.
20 AIRPORT MAINTENANCE APRON AREA(SY)	79.46	987.	81.	81.	93.
21 AIRPORT MAINTENANCE BUILDING(SF)	0.00	0.	0.	0.	0.
TOTAL IN THOUSANDS OF DOLLARS		64.5	0.8	0.9	1.4

LANDSIDE

PROJECT COST LESS FEDERAL GRANTS

	FED SHARE	1977	1982	1987	1992
1 AIR CARRIER TERMINAL AREA(SF)	0.00	600.	13800.	13800.	6900.
2 AIR CARRIER CARGO TERMINAL AREA(SF)	0.00	132.	88.	154.	254.
3 AIRLINE AC LOADING POSITIONS(NO.)	0.00	0.	0.	0.	0.
4 AC LOADING & BYPASS APRON AREAS(SY)	79.46	3697.	55.	74.	55.
5 AC PUBLIC AUTO PARKING SPACES(NO.)	0.00	0.	0.	0.	0.
6 AC PUBLIC AUTO PARKING AREAS(SY)	0.00	0.	0.	0.	0.
7 AIRPORT MAINTENANCE APRON AREA (SY)	79.46	382.	31.	31.	36.
8 AIRPORT MAINTENANCE BUILDING(SF)	0.00	828.	68.	68.	78.
9 FIRE & EMERGENCY EQUIPMENT BUILDING(SF)	79.46	2464.	0.	0.	0.
10 NUMBER OF FIRE AND RESCUE VEHICLES	82.00	7740.	0.	0.	0.
11 GA TERMINAL BUILDING AREA(SF)	0.00	5625.	1125.	1125.	1125.
12 GA AIRCRAFT LOADING POSITIONS(NUMBER)	0.00	0.	0.	0.	0.
13 GA AC LOADING & BYPASS APRON AREA(SY)	79.46	0.	0.	0.	0.
14 ITINERANT AIRCRAFT PARKING AREA(SY)	79.46	0.	0.	0.	141.
15 GA BASED AIRCRAFT TIE-DOWN AREA(SY)	79.46	755.	107.	107.	107.
16 GA CONV HANGAR BLDG AND APRON AREA(SY)	79.46	0.	0.	0.	0.
17 GA *T* HANGAR BLDG & APRON AREA(SY)	79.46	0.	0.	0.	0.
18 GA PUBLIC VEHICULAR PARKING SPACE(NO.)	0.00	0.	0.	0.	0.
19 GA PUBLIC VEHICULAR PARKING AREA(SY)	0.00	10813.	1040.	1040.	1040.
20 AIRPORT MAINTENANCE APRON AREA(SY)	79.46	255.	21.	21.	24.
21 AIRPORT MAINTENANCE BUILDING(SF)	0.00	345.	28.	28.	32.
TOTAL IN THOUSANDS OF DOLLARS		33.6	16.4	16.5	9.8

ANACONDA

The city of Anaconda is located within the mountainous southwest of Montana, 25 miles west of Butte. It is served by two paved highways (U. S. 10A and Mont. 40).

The airport is located four miles northeast of the city near State Route 40. The existing aircraft fleet is composed of small private (D & E) aircraft; however, type 'C' or small jets and heavy twins are expected by 1992.

Facility Requirements

A moderate amount of expansion will be required during the forecast period. Terminal building area and public vehicular parking area are the large land side items for the 1977 benchmark period. The cost of all items can be found on the following pages. The air side expansion will consist of a runway overlay in 1987 to accommodate the category C aircraft expected.

Obstructions southwest of the airport may limit the usefulness of an approach aid to this airport. Therefore, serious consideration should be given to the selection of another airport site for future operations. It may be possible that the requirements for both Anaconda and Butte can be met by a new airport at the Galen site northwest of Warm Springs.

Name: ANACONDA

Site Number: 12243

County: DEER LODGE

District: 12

PEAK HOUR IFR AND VFR DEMAND FORECASTS

	1977	1982	1987	1992
ANACONDA,MONTANA				
TOTAL PEAK HOUR VFR DEMAND	15.	16.	18.	20.
GA IFR PEAK HOUR DEMAND	1.	1.	2.	2.

OPERATIONAL DATA

DEMAND FORECAST INDICATORS	1977	1982	1987	1992
1 TOTAL GA ANNUAL OPERATIONS	6000.0	6330.0	6670.0	7330.0
2 GA PEAK HOUR OPERATIONS	15.0	16.0	18.0	20.0
3 PERCENT GA ITINERANT OPERATIONS	30.0	30.0	30.0	30.0
4 BASED AIRCRAFT UNDER 12500 LBS	6.0	7.0	8.0	9.0
5 BASED AIRCRAFT OVER 12500 LBS	0.0	0.0	0.0	0.0

AIRCRAFT MIX AND CAPACITY FORECASTS

	1972	1977	1982	1987	1992
AIRCRAFT TYPE *A*	0	0	0	0	0
AIRCRAFT TYPE *B*	0	0	0	0	0
AIRCRAFT TYPE *C*	0	0	2	3	4
AIRCRAFT TYPE *D+E*	100	100	98	97	96
HOURLY CAPACITY VFR	77	88	99	99	99
HOURLY CAPACITY IFR	0	0	0	0	0
ANNUAL CAPACITY(000)	107	122	138	138	138

DEVELOPMENT COST SUMMARY

PLAN PERIOD	PARTICIPATION	LAND SIDE	AIR SIDE	TOTAL
BEFORE 1977	FEDERAL			
	STATE/LOCAL			
	TOTAL			
1977	FEDERAL	$ 4,000	$	$ 4,000
	STATE/LOCAL	19,000		19,000
	TOTAL	23,000		23,000
1982	FEDERAL	1,000		1,000
	STATE/LOCAL	2,000		2,000
	TOTAL	3,000		3,000
1987	FEDERAL	2,000	60,000	62,000
	STATE/LOCAL	4,000	15,000	19,000
	TOTAL	6,000	75,000	81,000
1992	FEDERAL	1,000		1,000
	STATE/LOCAL	3,000		3,000
	TOTAL	4,000		4,000
TOTAL COSTS TO 1992	FEDERAL	8,000	60,000	68,000
	STATE/LOCAL	28,000	15,000	43,000
	TOTAL	36,000	75,000	111,000

ANACONDA

MSASP AIRFIELD DEVELOPMENT COSTS IN THOUSANDS OF 1972 DOLLARS

ANACONDA

AIRSIDE

		FED SHARE	TOTAL	FED GRANTS	STATE/LOCAL
1987					
1	OVERLAY RW (4/22)	79.46	73.00	59.59	13.40
	TOTAL ($000)		73.00	59.59	13.41
	TOTAL PROJECT COSTS		73.00	59.59	13.41

LANDSIDE

FEDERAL SHARE OF THE PROJECT COSTS

		FED SHARE	1977	1982	1987	1992
1	GA TERMINAL BUILDING AREA(SF)	0.00	0.	0.	0.	0.
2	GA AIRCRAFT LOADING POSITION$(NUMBER)	0.00	0.	0.	0.	0.
3	GA AC LOADING & BYPASS APRON AREA(SY)	79.46	572.	0.	810.	0.
4	ITINERANT AIRCRAFT PARKING AREA(SY)	79.46	0.	0.	500.	0.
5	GA BASED AIRCRAFT TIE-DOWN AREA(SY)	79.46	2505.	417.	417.	417.
6	GA CONV HANGAR BLDG AND APRON AREA(SY)	79.46	0.	0.	0.	0.
7	GA *T* HANGAR BLDG & APRON AREA(SY)	79.46	0.	0.	0.	0.
8	GA PUBLIC VEHICULAR PARKING SPACE(NO.)	0.00	0.	0.	0.	0.
9	GA PUBLIC VEHICULAR PARKING AREA(SY)	0.00	0.	0.	0.	0.
10	AIRPORT MAINTENANCE APRON AREA(SY)	79.46	858.	47.	49.	94.
11	AIRPORT MAINTENANCE BUILDING(SF)	0.00	0.	0.	0.	0.
	TOTAL IN THOUSANDS OF DOLLARS		3.9	0.5	1.8	0.5

PROJECT COST LESS FEDERAL GRANTS

		FED SHARE	1977	1982	1987	1992
1	GA TERMINAL BUILDING AREA(SF)	0.00	11150.	810.	1620.	1620.
2	GA AIRCRAFT LOADING POSITIONS(NUMBER)	0.00	0.	0.	0.	0.
3	GA AC LOADING & BYPASS APRON AREA(SY)	79.46	147.	0.	209.	0.
4	ITINERANT AIRCRAFT PARKING AREA(SY)	79.46	0.	0.	129.	0.
5	GA BASED AIRCRAFT TIE-DOWN AREA(SY)	79.46	647.	107.	107.	107.
6	GA CONV HANGAR BLDG AND APRON AREA(SY)	79.46	0.	0.	0.	0.
7	GA *T* HANGAR BLDG & APRON AREA(SY)	79.46	0.	0.	0.	0.
8	GA PUBLIC VEHICULAR PARKING SPACE(NO.)	0.00	0.	0.	0.	0.
9	GA PUBLIC VEHICULAR PARKING AREA(SY)	0.00	6727.	748.	1497.	1497.
10	AIRPORT MAINTENANCE APRON AREA(SY)	79.46	221.	12.	12.	24.
11	AIRPORT MAINTENANCE BUILDING(SF)	0.00	300.	17.	17.	33.
	TOTAL IN THOUSANDS OF DOLLARS		19.2	1.7	3.6	3.3

ASHLAND

This town is located in the level terrain of southeast Montana between the Northern Cheyenne Indian Reservation and the Custer National Forest. One unpaved and one paved highway (U. S. 212) serve the city N/S and E/W.

The present airport is operated by the St. Labre Mission one mile northwest of town.

Facility Requirements

The forecasts indicate a need for a utility airport, however, the present airport will be closed by 1978. A new airport site should be selected preferably through a master plan.

NAVAIDS: An NDB is recommended for installation by 1977, in order to meet the IFR demands forecasted through 1992.

Name: ASHLAND

Site Number:. 12245.7

County:. ROSEBUD

District:. 3

PEAK HOUR IFR AND VFR DEMAND FORECASTS

	1977	1982	1987	1992
ASHLAND,MONTANA				
TOTAL PEAK HOUR VFR DEMAND	10.	13.	14.	16.
GA IFR PEAK HOUR DEMAND	1.	1.	1.	2.

OPERATIONAL DATA

DEMAND FORECAST INDICATORS	1977	1982	1987	1992
1 TOTAL GA ANNUAL OPERATIONS	4330.0	5000.0	5670.0	6330.0
2 GA PEAK HOUR OPERATIONS	10.0	13.0	14.0	16.0
3 PERCENT GA ITINERANT OPERATIONS	30.0	30.0	30.0	30.0
4 BASED AIRCRAFT UNDER 12500 LBS	6.0	7.0	8.0	9.0
5 BASED AIRCRAFT OVER 12500 LBS	0.0	0.0	0.0	0.0

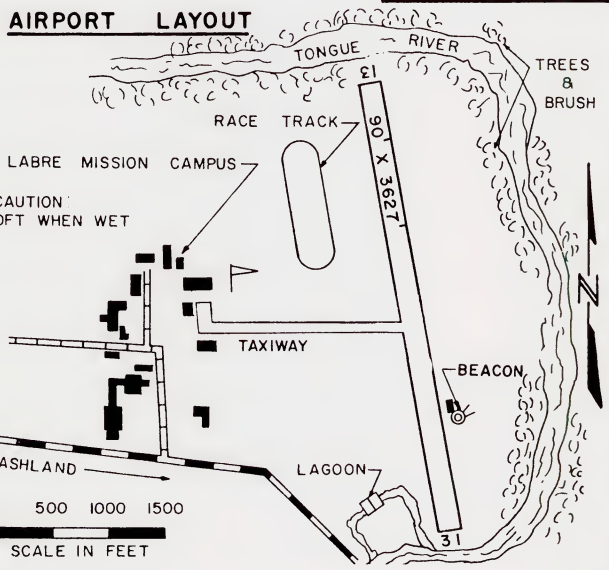
AIRCRAFT MIX AND CAPACITY FORECASTS

	1972	1977	1982	1987	1992
AIRCRAFT TYPE *A*	0	0	0	0	0
AIRCRAFT TYPE *B*	0	0	0	0	0
AIRCRAFT TYPE *C*	0	0	0	1	2
AIRCRAFT TYPE *D-E*	100	100	100	99	98
HOURLY CAPACITY VFR	77	88	99	99	99
HOURLY CAPACITY IFR	0	0	0	0	0
ANNUAL CAPACITY(000)	107	122	138	138	138

DEVELOPMENT COST SUMMARY

PLAN PERIOD	PARTICIPATION	LAND SIDE	AIR SIDE	TOTAL
BEFORE 1977	FEDERAL			
	STATE/LOCAL			
	TOTAL			
1977	FEDERAL	$ 4,000	$ 202,000	$ 206,000
	STATE/LOCAL	9,000	86,000	95,000
	TOTAL	13,000	288,000	301,000
1982	FEDERAL	1,000		1,000
	STATE/LOCAL	12,000		12,000
	TOTAL	13,000		13,000
1987	FEDERAL	1,000		1,000
	STATE/LOCAL	2,000		2,000
	TOTAL	3,000		3,000
1992	FEDERAL	1,000		1,000
	STATE/LOCAL	3,000		3,000
	TOTAL	4,000		4,000
TOTAL COSTS TO 1992	FEDERAL	7,000	202,000	209,000
	STATE/LOCAL	26,000	86,000	112,000
	TOTAL	33,000	288,000	321,000

ASHLAND


AIRPORT LAYOUT
TONGUE RIVER
TREES & BRUSH
13
RACE TRACK
90' X 3627'
ST. LABRE MISSION CAMPUS
CAUTION SOFT WHEN WET
TAXIWAY
BEACON
N
ASHLAND
LAGOON
31
0 500 1000 1500
SCALE IN FEET

MSASP AIRFIELD DEVELOPMENT COSTS IN THOUSANDS OF 1972 DOLLARS

ASHLAND - NEW

AIRSIDE

	FED SHARE	TOTAL	FED GRANTS	STATE/LOCAL
1977				
1 SITE NORTH OF EXISTING				
A LAND ACQUISITION	79.46	11.00	8.74	2.25
B SITE PREPARATION	79.46	15.00	11.91	3.08
C DRAINAGE	79.46	12.00	9.53	2.46
D UNPAVED ACCESS ROAD	0.00	29.00	0.00	29.00
E AIRCRAFT PARKING	79.46	1.60	1.27	0.32
F AUTO PARKING	0.00	1.60	0.00	1.60
2 PAVE RUNWAY	79.46	170.00	135.08	34.91
3 LANDING AIDS				
A MIRL	79.46	32.00	25.42	6.57
B BEACON	79.46	3.00	2.37	1.02
4 NDB	79.46	8.00	6.35	1.64
5 UTILITIES ETC	0.00	7.00	0.00	7.00
TOTAL ($000)		288.25	202.36	85.94
TOTAL PROJECT COSTS		288.25	202.36	85.94

LANDSIDE

FEDERAL SHARE OF THE PROJECT COSTS

	FED SHARE	1977	1982	1987	1992
1 GA TERMINAL BUILDING AREA(SF)	0.00	0.	0.	0.	0.
2 GA AIRCRAFT LOADING POSITIONS(NUMBER)	0.00	0.	0.	0.	0.
3 GA AC LOADING & BYPASS APRON AREA(SY)	79.46	810.	810.	0.	0.
4 ITINERANT AIRCRAFT PARKING AREA(SY)	79.46	0.	0.	0.	0.
5 GA BASED AIRCRAFT TIE-DOWN AREA(SY)	79.46	2505.	417.	417.	417.
6 GA CONV HANGAR BLDG AND APRON AREA(SY)	79.46	0.	0.	0.	0.
7 GA *T* HANGAR BLDG & APRON AREA(SY)	79.46	0.	0.	0.	0.
8 GA PUBLIC VEHICULAR PARKING SPACE(NO.)	0.00	0.	0.	0.	0.
9 GA PUBLIC VEHICULAR PARKING AREA(SY)	0.00	0.	0.	0.	0.
10 AIRPORT MAINTENANCE APRON AREA(SY)	79.46	619.	96.	96.	94.
11 AIRPORT MAINTENANCE BUILDING(SF)	0.00	0.	0.	0.	0.
TOTAL IN THOUSANDS OF DOLLARS		3.9	1.3	0.5	0.5

PROJECT COST LESS FEDERAL GRANTS

	FED SHARE	1977	1982	1987	1992
1 GA TERMINAL BUILDING AREA(SF)	0.00	0.	10030.	810.	1620.
2 GA AIRCRAFT LOADING POSITIONS(NUMBER)	0.00	0.	0.	0.	0.
3 GA AC LOADING & BYPASS APRON AREA(SY)	79.46	209.	209.	0.	0.
4 ITINERANT AIRCRAFT PARKING AREA(SY)	79.46	0.	0.	0.	0.
5 GA BASED AIRCRAFT TIE-DOWN AREA(SY)	79.46	647.	107.	107.	107.
6 GA CONV HANGAR BLDG AND APRON AREA(SY)	79.46	0.	0.	0.	0.
7 GA *T* HANGAR BLDG & APRON AREA(SY)	79.46	0.	0.	0.	0.
8 GA PUBLIC VEHICULAR PARKING SPACE(NO.)	0.00	0.	0.	0.	0.
9 GA PUBLIC VEHICULAR PARKING AREA(SY)	0.00	748.	2245.	748.	1497.
10 AIRPORT MAINTENANCE APRON AREA(SY)	79.46	160.	24.	24.	24.
11 AIRPORT MAINTENANCE BUILDING(SF)	0.00	217.	33.	34.	33.
TOTAL IN THOUSANDS OF DOLLARS		8.7	12.7	1.7	3.3

AUGUSTA

Augusta is 50 miles due west of Great Falls and is the first city east of the Rocky Mountains. It has paved roads leading east, south and north only.

The airport is located in a rural area adjacent to State Route 287 two miles southeast of the city. There will be no change in service level by 1992.

Facility Requirements

Minimal expansion will be required at this airport. The landing strip will need to be widened slightly. See the following pages for items and costs.

Name: AUGUSTA

Site Number:. 12247.2

County:. LEWIS AND CLARK

District:. 8

PEAK HOUR IFR AND VFR DEMAND FORECASTS

	1977	1982	1987	1992
AUGUSTA, MONTANA				
TOTAL PEAK HOUR VFR DEMAND	2.	2.	3.	4.
GA IFR PEAK HOUR DEMAND	0.	0.	0.	0.

OPERATIONAL DATA

DEMAND FORECAST INDICATORS

	1977	1982	1987	1992
1 TOTAL GA ANNUAL OPERATIONS	800.0	1000.0	1400.0	1900.0
2 GA PEAK HOUR OPERATIONS	2.0	2.0	3.0	4.0
3 PERCENT GA ITINERANT OPERATIONS	100.0	100.0	93.0	88.0
4 BASED AIRCRAFT UNDER 12500 LBS	0.0	0.0	1.0	1.0
5 BASED AIRCRAFT OVER 12500 LBS	0.0	0.0	0.0	0.0

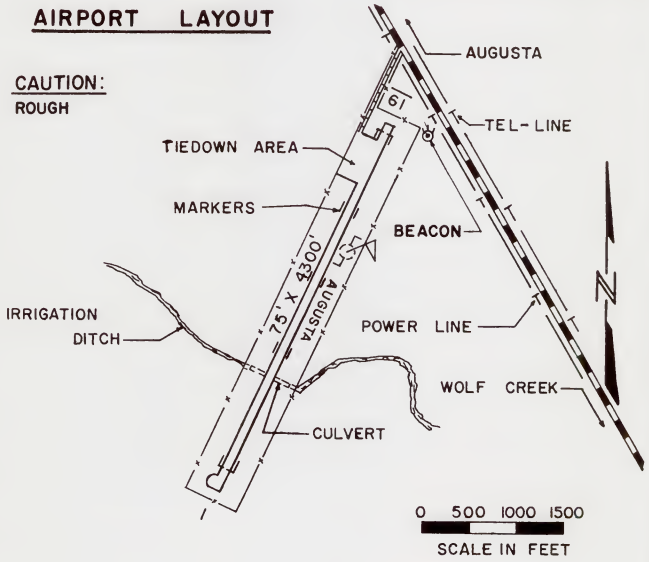
AIRCRAFT MIX AND CAPACITY FORECASTS

	1972	1977	1982	1987	1992
AIRCRAFT TYPE *A*	0	0	0	0	0
AIRCRAFT TYPE *B*	0	0	0	0	0
AIRCRAFT TYPE *C*	0	0	0	0	0
AIRCRAFT TYPE *D+E+	100	100	100	100	100
HOURLY CAPACITY VFR	85	92	99	99	99
HOURLY CAPACITY IFR	0	0	0	0	0
ANNUAL CAPACITY(000)	118	128	138	138	138

DEVELOPMENT COST SUMMARY

PLAN PERIOD	PARTICIPATION	LAND SIDE	AIR SIDE	TOTAL
BEFORE 1977	FEDERAL	$	$	$
	STATE/LOCAL		3,000	3,000
	TOTAL		3,000	3,000
1977	FEDERAL			
	STATE/LOCAL	3,000		3,000
	TOTAL	3,000		3,000
1982	FEDERAL			
	STATE/LOCAL			
	TOTAL			
1987	FEDERAL			
	STATE/LOCAL	2,000		2,000
	TOTAL	2,000		2,000
1992	FEDERAL			
	STATE/LOCAL	2,000		2,000
	TOTAL	2,000		2,000
TOTAL COSTS TO 1992	FEDERAL			
	STATE/LOCAL	7,000	3,000	10,000
	TOTAL	7,000	3,000	10,000

AUGUSTA


AIRPORT LAYOUT
CAUTION:
ROUGH
AUGUSTA
61
TEL-LINE
TIEDOWN AREA
MARKERS
BEACON
75' X 4300'
AUGUSTA
IRRIGATION
DITCH
POWER LINE
WOLF CREEK
CULVERT
N
0 500 1000 1500
SCALE IN FEET

MSASP AIRFIELD DEVELOPMENT COSTS IN THOUSANDS OF 1972 DOLLARS

AUGUSTA

	FED SHARE	TOTAL	FED GRANTS	STATE/LOCAL
BEFORE 1977				
1 WIDEN LANDING STRIP	0.00	2.76	0.00	2.76
TOTAL ($000)		2.76	0.00	2.76
TOTAL PROJECT COSTS		2.76	0.00	2.76

SIDE A

FEDERAL SHARE OF THE PROJECT COSTS

	FED SHARE	1977	1982	1987	1992
1 GA TERMINAL BUILDING AREA(SF)	0.00	0.	0.	0.	0.
2 GA AIRCRAFT LOADING POSITIONS(NUMBER)	0.00	0.	0.	0.	0.
3 GA AC LOADING & BYPASS APRON AREA(SY)	0.00	0.	0.	0.	0.
4 ITINERANT AIRCRAFT PARKING AREA(SY)	0.00	0.	0.	0.	0.
5 GA BASED AIRCRAFT TIE-DOWN AREA(SY)	0.00	0.	0.	0.	0.
6 GA CONV HANGAR BLDG AND APRON AREA(SY)	0.00	0.	0.	0.	0.
7 GA *T* HANGAR BLDG & APRON AREA(SY)	0.00	0.	0.	0.	0.
8 GA PUBLIC VEHICULAR PARKING SPACE(NO.)	0.00	0.	0.	0.	0.
9 GA PUBLIC VEHICULAR PARKING AREA(SY)	0.00	0.	0.	0.	0.
10 AIRPORT MAINTENANCE APRON AREA(SY)	0.00	0.	0.	0.	0.
11 AIRPORT MAINTENANCE BUILDING(SF)	0.00	0.	0.	0.	0.
TOTAL IN THOUSANDS OF DOLLARS		0.0	0.0	0.0	0.0

SIDE B

PROJECT COST LESS FEDERAL GRANTS

	FED SHARE	1977	1982	1987	1992
1 GA TERMINAL BUILDING AREA(SF)	0.00	0.	0.	0.	0.
2 GA AIRCRAFT LOADING POSITIONS(NUMBER)	0.00	0.	0.	0.	0.
3 GA AC LOADING & BYPASS APRON AREA(SY)	0.00	1020.	0.	0.	1020.
4 ITINERANT AIRCRAFT PARKING AREA(SY)	0.00	0.	0.	0.	0.
5 GA BASED AIRCRAFT TIE-DOWN AREA(SY)	0.00	3.	0.	525.	0.
6 GA CONV HANGAR BLDG AND APRON AREA(SY)	0.00	0.	0.	408.	0.
7 GA *T* HANGAR BLDG & APRON AREA(SY)	0.00	0.	0.	408.	0.
8 GA PUBLIC VEHICULAR PARKING SPACE(NO.)	0.00	0.	0.	0.	0.
9 GA PUBLIC VEHICULAR PARKING AREA(SY)	0.00	1497.	0.	748.	748.
10 AIRPORT MAINTENANCE APRON AREA(SY)	0.00	144.	36.	72.	90.
11 AIRPORT MAINTENANCE BUILDING(SF)	0.00	40.	10.	20.	25.
TOTAL IN THOUSANDS OF DOLLARS		2.7	0.1	2.4	1.9

SIDE C

SIDE D

BABB

Located on the eastern foothills of the Rockies and 20 miles from Canada, Babb is only served by north-south highways.

The airport is one mile southeast of town and adjacent to U. S. 89. Only 'D & E' aircraft type has been forecasted for this airport.

Facility Requirements

This facility will need moderate improvements through the 1987 increment. Only slight land side expansion is needed; while a crosswind runway, a MIRL system and a beacon are the air side requirements. Items and costs are contained on the following pages.

NAVAIDS: An NDB is recommended for installation by 1987, in order to accommodate the IFR peak hour demands through 1992.

Name: BABB

Site Number:. 12252

County:. GLACIER

District:. 5

PEAK HOUR IFR AND VFR DEMAND FORECASTS

	1977	1982	1987	1992
BABB, MONTANA				
TOTAL PEAK HOUR VFR DEMAND	3.	4.	6.	6.
GA IFR PEAK HOUR DEMAND	0.	0.	1.	1.

OPERATIONAL DATA

DEMAND FORECAST INDICATORS	1977	1982	1987	1992
1 TOTAL GA ANNUAL OPERATIONS	1300.0	1800.0	2500.0	2900.0
2 GA PEAK HOUR OPERATIONS	3.0	4.0	6.0	6.0
3 PERCENT GA ITINERANT OPERATIONS	90.0	87.0	85.0	82.0
4 BASED AIRCRAFT UNDER 12500 LBS	1.0	1.0	2.0	2.0
5 BASED AIRCRAFT OVER 12500 LBS	0.0	0.0	0.0	0.0

AIRCRAFT MIX AND CAPACITY FORECASTS

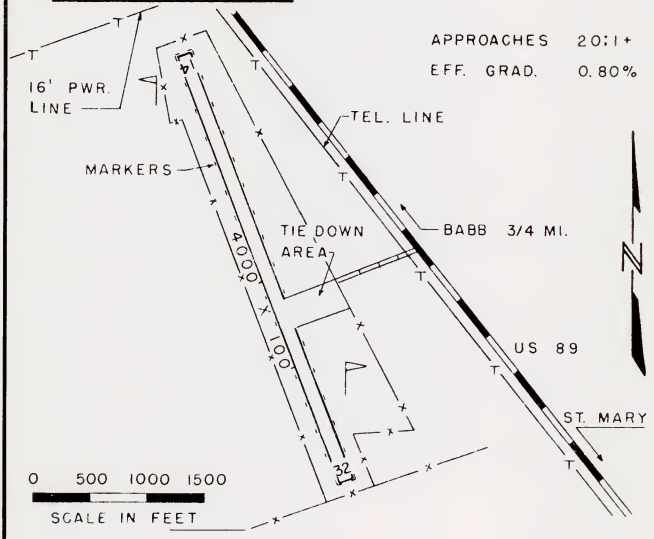
	1972	1977	1982	1987	1992
AIRCRAFT TYPE *A*	0	0	0	0	0
AIRCRAFT TYPE *B*	0	0	0	0	0
AIRCRAFT TYPE *C*	0	0	0	0	0
AIRCRAFT TYPE *D+E*	100	100	100	100	100
HOURLY CAPACITY VFR	82	88	99	99	99
HOURLY CAPACITY IFR	0	0	0	0	0
ANNUAL CAPACITY(000)	114	122	138	138	138

DEVELOPMENT COST SUMMARY

PLAN PERIOD	PARTICIPATION	LAND SIDE	AIR SIDE	TOTAL
BEFORE 1977	FEDERAL			
	STATE/LOCAL			
	TOTAL			
1977	FEDERAL			
	STATE/LOCAL	$ 7,000	$	$ 7,000
	TOTAL	7,000		7,000
1982	FEDERAL			
	STATE/LOCAL	3,000		3,000
	TOTAL	3,000		3,000
1987	FEDERAL	3,000	80,000	83,000
	STATE/LOCAL	3,000	21,000	24,000
	TOTAL	6,000	101,000	107,000
1992	FEDERAL			
	STATE/LOCAL			
	TOTAL			
TOTAL COSTS TO 1992	FEDERAL	3,000	80,000	83,000
	STATE/LOCAL	13,000	21,000	34,000
	TOTAL	16,000	101,000	117,000

BABB

AIRPORT LAYOUT



MSASP AIRFIELD DEVELOPMENT COSTS IN THOUSANDS OF 1972 DOLLARS

RABR

AIRSIDE

	FED SHARE	TOTAL	FED GRANTS	STATE/LOCAL
1987				
1 LANDING AIDS				
A MIRL	79.46	28.00	22.24	5.75
B REACON	79.46	5.00	3.97	1.02
2 NAVAIDS				
A NDB	79.46	8.00	6.35	1.64
3 CROSSWIND RUNWAY	79.46	60.00	47.67	12.32
TOTAL ($000)		101.02	80.27	20.76
TOTAL PROJECT COSTS		101.02	80.27	20.76

LANDSIDE

FEDERAL SHARE OF THE PROJECT COSTS

	FED SHARE	1977	1982	1987	1992
1 GA TERMINAL BUILDING AREA(SF)	0.00	0.	0.	0.	0.
2 GA AIRCRAFT LOADING POSITIONS(NUMBER)	0.00	0.	0.	0.	0.
3 GA AC LOADING & BYPASS APRON AREA(SY)	79.46	0.	0.	810.	0.
4 ITINERANT AIRCRAFT PARKING AREA(SY)	79.46	0.	0.	1216.	0.
5 GA BASED AIRCRAFT TIE-DOWN AREA(SY)	79.46	0.	0.	417.	0.
6 GA CONV HANGAR BLDG AND APRON AREA(SY)	79.46	0.	0.	162.	0.
7 GA *T* HANGAR BLDG & APRON AREA(SY)	79.46	0.	0.	161.	0.
8 GA PUBLIC VEHICULAR PARKING SPACE(NO.)	0.00	0.	0.	0.	0.
9 GA PUBLIC VEHICULAR PARKING AREA(SY)	0.00	0.	0.	0.	0.
10 AIRPORT MAINTENANCE APRON AREA(SY)	79.46	0.	0.	100.	57.
11 AIRPORT MAINTENANCE BUILDING(SF)	0.00	0.	0.	0.	0.
TOTAL IN THOUSANDS OF DOLLARS		0.0	0.0	2.9	0.1

PROJECT COST LESS FEDERAL GRANTS

	FED SHARE	1977	1982	1987	1992
1 GA TERMINAL BUILDING AREA(SF)	0.00	0.	0.	0.	0.
2 GA AIRCRAFT LOADING POSITIONS(NUMBER)	0.00	0.	0.	0.	0.
3 GA AC LOADING & BYPASS APRON AREA(SY)	79.46	1020.	1020.	209.	0.
4 ITINERANT AIRCRAFT PARKING AREA(SY)	79.46	1530.	1530.	314.	0.
5 GA BASED AIRCRAFT TIE-DOWN AREA(SY)	79.46	528.	0.	107.	0.
6 GA CONV HANGAR BLDG AND APRON AREA(SY)	79.46	408.	0.	246.	0.
7 GA *T* HANGAR BLDG & APRON AREA(SY)	79.46	408.	0.	447.	0.
8 GA PUBLIC VEHICULAR PARKING SPACE(NO.)	0.00	0.	0.	0.	0.
9 GA PUBLIC VEHICULAR PARKING AREA(SY)	0.00	2245.	748.	1497.	0.
10 AIRPORT MAINTENANCE APRON AREA(SY)	79.46	234.	90.	25.	14.
11 AIRPORT MAINTENANCE BUILDING(SF)	0.00	65.	25.	35.	20.
TOTAL IN THOUSANDS OF DOLLARS		6.6	3.4	2.9	0.0

BAKER

Baker is located at the intersection of U. S. 12 and State Route 7, approximately 10 miles from South Dakota and 100 miles from Wyoming. Miles City has the nearest air carrier service 80 miles westward.

The airport cannot expand northward as it is near the town, however, the remaining area is agricultural in nature and no environmental problems should be encountered in these directions. Type 'C' aircraft is expected by 1982.

Facility Requirements

Baker Municipal will need to undergo a large expansion program. Most of the land side expansion will occur by the 1977 increment. Terminal building area and public vehicular parking area are the large cost items. Air side addition will be a MIRL system and beacon before 1977 and a runway overlay by 1987. Items and costs can be found on the following pages.

NAVAIDS: An NDB is recommended for installation by 1977, in order to accommodate the IFR demands through 1992.

Name: BAKER

Site Number:. 12253

County:. FALLON

District:. 3

PEAK HOUR IFR AND VFR DEMAND FORECASTS

	1977	1982	1987	1992
BAKER, MONTANA				
TOTAL PEAK HOUR VFR DEMAND	15.	16.	17.	19.
GA IFR PEAK HOUR DEMAND	1.	1.	2.	2.

OPERATIONAL DATA

DEMAND FORECAST INDICATORS

	1977	1982	1987	1992
1 TOTAL GA ANNUAL OPERATIONS	6330.0	6970.0	7710.0	8490.0
2 GA PEAK HOUR OPERATIONS	15.0	16.0	17.0	19.0
3 PERCENT GA ITINERANT OPERATIONS	30.0	33.0	35.0	37.0
4 BASED AIRCRAFT UNDER 12500 LBS	14.0	15.0	16.0	17.0
5 BASED AIRCRAFT OVER 12500 LBS	0.0	0.0	0.0	0.0

AIRCRAFT MIX AND CAPACITY FORECASTS

	1972	1977	1982	1987	1992
AIRCRAFT TYPE *A*	0	0	0	0	0
AIRCRAFT TYPE *B*	0	0	0	0	0
AIRCRAFT TYPE *C*	0	0	3	5	8
AIRCRAFT TYPE *D+E*	100	100	97	95	92
HOURLY CAPACITY VFR	85	92	99	99	99
HOURLY CAPACITY IFR	0	0	0	0	0
ANNUAL CAPACITY(000)	118	128	138	138	138

DEVELOPMENT COST SUMMARY

PLAN PERIOD	PARTICIPATION	LAND SIDE	AIR SIDE	TOTAL
BEFORE 1977	FEDERAL	$	$ 34,000	$ 34,000
	STATE/LOCAL		9,000	9,000
	TOTAL		43,000	43,000
1977	FEDERAL	6,000	6,000	12,000
	STATE/LOCAL	22,000	2,000	24,000
	TOTAL	28,000	8,000	36,000
1982	FEDERAL	3,000		3,000
	STATE/LOCAL	2,000		2,000
	TOTAL	5,000		5,000
1987	FEDERAL	1,000	55,000	56,000
	STATE/LOCAL	2,000	14,000	16,000
	TOTAL	3,000	69,000	72,000
1992	FEDERAL	3,000		3,000
	STATE/LOCAL	4,000		4,000
	TOTAL	7,000		7,000
TOTAL COSTS TO 1992	FEDERAL	13,000	95,000	108,000
	STATE/LOCAL	30,000	25,000	55,000
	TOTAL	43,000	120,000	163,000

BAKER

MSASP AIRFIELD DEVELOPMENT COSTS IN THOUSANDS OF 1972 DOLLARS

BAKER

AIRSIDE

	FED SHARE	TOTAL	FED GRANTS	STATE/LOCAL
BEFORE 1977				
1 LANDING AIDS				
A MIRL	79.46	38.40	30.51	7.88
B REACON	79.46	5.00	3.97	1.02
TOTAL ($000)		43.40	34.49	8.92
1977				
2 NAVAIDS				
A NDB	79.46	8.00	6.35	1.64
TOTAL ($000)		8.00	6.36	1.64
1987				
3 OVERLAY RUNWAY(12/30)	79.46	66.70	52.99	13.70
4 OBSTRUCTION REMOVAL	79.46	2.00	1.58	0.41
TOTAL ($000)		68.70	54.59	14.12
TOTAL PROJECT COSTS		120.12	95.45	24.69

LANDSIDE

FEDERAL SHARE OF THE PROJECT COSTS

	FED SHARE	1977	1982	1987	1992
1 GA TERMINAL BUILDING AREA(SF)	0.00	0.	0.	0.	0.
2 GA AIRCRAFT LOADING POSITIONS(NUMBER)	0.00	0.	0.	0.	0.
3 GA AC LOADING & BYPASS APRON AREA(SY)	79.46	1621.	810.	0.	810.
4 ITINERANT AIRCRAFT PARKING AREA(SY)	79.46	524.	1216.	0.	1216.
5 GA BASED AIRCRAFT TIE-DOWN AREA(SY)	79.46	3268.	417.	417.	417.
6 GA CONV HANGAR BLDG AND APRON AREA(SY)	79.46	0.	0.	0.	0.
7 GA *T* HANGAR BLDG & APRON AREA(SY)	79.46	0.	0.	0.	0.
8 GA PUBLIC VEHICULAR PARKING SPACE(NO.)	0.00	0.	0.	0.	0.
9 GA PUBLIC VEHICULAR PARKING AREA(SY)	0.00	0.	0.	0.	0.
10 AIRPORT MAINTENANCE APRON AREA(SY)	79.46	47.	91.	106.	134.
11 AIRPORT MAINTENANCE BUILDING(SF)	0.00	0.	0.	0.	0.
TOTAL IN THOUSANDS OF DOLLARS		5.5	2.5	0.5	2.6

PROJECT COST LESS FEDERAL GRANTS

	FED SHARE	1977	1982	1987	1992
1 GA TERMINAL BUILDING AREA(SF)	0.00	9150.	810.	810.	1620.
2 GA AIRCRAFT LOADING POSITIONS(NUMBER)	0.00	0.	0.	0.	0.
3 GA AC LOADING & BYPASS APRON AREA(SY)	79.46	419.	209.	0.	209.
4 ITINERANT AIRCRAFT PARKING AREA(SY)	79.46	135.	314.	0.	314.
5 GA BASED AIRCRAFT TIE-DOWN AREA(SY)	79.46	844.	107.	107.	107.
6 GA CONV HANGAR BLDG AND APRON AREA(SY)	79.46	0.	0.	0.	0.
7 GA *T* HANGAR BLDG & APRON AREA(SY)	79.46	0.	0.	0.	0.
8 GA PUBLIC VEHICULAR PARKING SPACE(NO.)	0.00	0.	0.	0.	0.
9 GA PUBLIC VEHICULAR PARKING AREA(SY)	0.00	11227.	748.	748.	1497.
10 AIRPORT MAINTENANCE APRON AREA(SY)	79.46	12.	23.	27.	34.
11 AIRPORT MAINTENANCE BUILDING(SF)	0.00	0.	0.	0.	0.
TOTAL IN THOUSANDS OF DOLLARS		21.8	2.2	1.7	3.8

BENCHMARK

The U.S. Forest Service operates this airport which also is open to the public. It is located 75 miles west of Great Falls and within the Rocky Mountains. The airport serves the Flathead National Forest where there are no highways or commerce. No future air side developments are required to accommodate the fleet of small aircraft expected. Only minimal land side expansion is necessary. This airport is recommended for entry into the National Airport System Plan because it is near the national forest and federally owned (Criterion #7 of FAA Order 5090.3).

Name: BENCHMARK

Site Number: 12256.6

County: LEWIS AND CLARK

District: 8

PEAK HOUR IFR AND VFR DEMAND FORECASTS

	1977	1982	1987	1992
BENCHMARK, MONTANA				
TOTAL PEAK HOUR VFR DEMAND	1.	1.	1.	2.
GA IFR PEAK HOUR DEMAND	0.	0.	0.	0.

OPERATIONAL DATA

DEMAND FORECAST INDICATORS

	1977	1982	1987	1992
1 TOTAL GA ANNUAL OPERATIONS	200.0	300.0	400.0	500.0
2 GA PEAK HOUR OPERATIONS	1.0	1.0	1.0	8.0
3 PERCENT GA ITINERANT OPERATIONS	100.0	100.0	75.0	60.0
4 BASED AIRCRAFT UNDER 12500 LBS	0.0	0.0	1.0	1.0
5 BASED AIRCRAFT OVER 12500 LBS	0.0	0.0	0.0	0.0

AIRCRAFT MIX AND CAPACITY FORECASTS

	1972	1977	1982	1987	1992
AIRCRAFT TYPE *A*	0	0	0	0	0
AIRCRAFT TYPE *B*	0	0	0	0	0
AIRCRAFT TYPE *C*	0	0	0	0	0
AIRCRAFT TYPE *D+E*	100	100	100	100	100
HOURLY CAPACITY VFR	77	88	99	99	99
HOURLY CAPACITY IFR	0	0	0	0	0
ANNUAL CAPACITY(000)	107	122	138	138	138

DEVELOPMENT COST SUMMARY

PLAN PERIOD	PARTICIPATION	LAND SIDE	AIR SIDE	TOTAL
BEFORE 1977	FEDERAL			
	STATE/LOCAL			
	TOTAL			
1977	FEDERAL	$ 1,000	$	$ 1,000
	STATE/LOCAL			
	TOTAL	1,000		1,000
1982	FEDERAL			
	STATE/LOCAL			
	TOTAL			
1987	FEDERAL	2,000		2,000
	STATE/LOCAL			
	TOTAL	2,000		2,000
1992	FEDERAL	3,000		3,000
	STATE/LOCAL			
	TOTAL	3,000		3,000
TOTAL COSTS TO 1992	FEDERAL	6,000		6,000
	STATE/LOCAL			
	TOTAL	6,000		6,000

BENCHMARK

0 2500 5000

Approximate Scale in feet

BENCHMARK

NO AIR SIDE DEVELOPMENTS REQUIRED

FEDERAL SHARE OF THE PROJECT COSTS

		FED SHARE	1977	1982	1987	1992
1	GA TERMINAL BUILDING AREA(SF)	100.00	0.	0.	0.	0.
2	GA AIRCRAFT LOADING POSITIONS(NUMBER)	100.00	0.	0.	0.	0.
3	GA AC LOADING & BYPASS APRON AREA(SY)	100.00	0.	0.	0.	1020.
4	ITINERANT AIRCRAFT PARKING AREA(SY)	100.00	0.	0.	0.	1530.
5	GA BASED AIRCRAFT TIE-DOWN AREA(SY)	100.00	3.	0.	525.	0.
6	GA CONV HANGAR BLDG AND APRON AREA(SY)	100.00	0.	0.	408.	0.
7	GA *T* HANGAR BLDG & APRON AREA(SY)	100.00	0.	0.	608.	0.
8	GA PUBLIC VEHICULAR PARKING SPACE(NO.)	100.00	0.	0.	0.	0.
9	GA PUBLIC VEHICULAR PARKING AREA(SY)	100.00	748.	0.	0.	748.
10	AIRPORT MAINTENANCE APRON AREA(SY)	100.00	36.	18.	18.	18.
11	AIRPORT MAINTENANCE BUILDING(SF)	100.00	10.	5.	5.	5.
	TOTAL IN THOUSANDS OF DOLLARS		0.8	0.0	1.6	3.3

LAND SIDE

PROJECT COST LESS FEDERAL GRANTS

		FED SHARE	1977	1982	1987	1992
1	GA TERMINAL BUILDING AREA(SF)	100.00	0.	0.	0.	0.
2	GA AIRCRAFT LOADING POSITIONS(NUMBER)	100.00	0.	0.	0.	0.
3	GA AC LOADING & BYPASS APRON AREA(SY)	100.00	0.	0.	0.	0.
4	ITINERANT AIRCRAFT PARKING AREA(SY)	100.00	0.	0.	0.	0.
5	GA BASED AIRCRAFT TIE-DOWN AREA(SY)	100.00	0.	0.	0.	0.
6	GA CONV HANGAR BLDG AND APRON AREA(SY)	100.00	0.	0.	0.	0.
7	GA *T* HANGAR BLDG & APRON AREA(SY)	100.00	0.	0.	0.	0.
8	GA PUBLIC VEHICULAR PARKING SPACE(NO.)	100.00	0.	0.	0.	0.
9	GA PUBLIC VEHICULAR PARKING AREA(SY)	100.00	0.	0.	0.	0.
10	AIRPORT MAINTENANCE APRON AREA(SY)	100.00	0.	0.	0.	0.
11	AIRPORT MAINTENANCE BUILDING(SF)	100.00	0.	0.	0.	0.
	TOTAL IN THOUSANDS OF DOLLARS		0.0	0.0	0.0	0.0

BIG SANDY

Located along U. S. highway 87, forty miles southwest of Havre and 70 miles from Great Falls, Big Sandy is part of the northwest plateau region of Montana. The airport is about one mile south near state highway 27.

Facility Requirements

Only small land side expansion is needed. The air side addition will require a considerable lengthening of runway 6/24. Costs and items are found on the following pages.

Name: BIG SANDY

Site Number:. 12259

County:. CHOUTEAU

District:. 5

PEAK HOUR IFR AND VFR DEMAND FORECASTS

	1977	1982	1987	1992
BIG SANDY, MONTANA				
TOTAL PEAK HOUR VFR DEMAND	5.	5.	5.	6.
GA IFR PEAK HOUR DEMAND	0.	0.	0.	1.

OPERATIONAL DATA

DEMAND FORECAST INDICATORS	1977	1982	1987	1992
1 TOTAL GA ANNUAL OPERATIONS	2000.0	2200.0	2330.0	2670.0
2 GA PEAK HOUR OPERATIONS	5.0	5.0	5.0	6.0
3 PERCENT GA ITINERANT OPERATIONS	30.0	30.0	30.0	30.0
4 BASED AIRCRAFT UNDER 12500 LBS	3.0	3.0	4.0	4.0
5 BASED AIRCRAFT OVER 12500 LBS	0.0	0.0	0.0	0.0

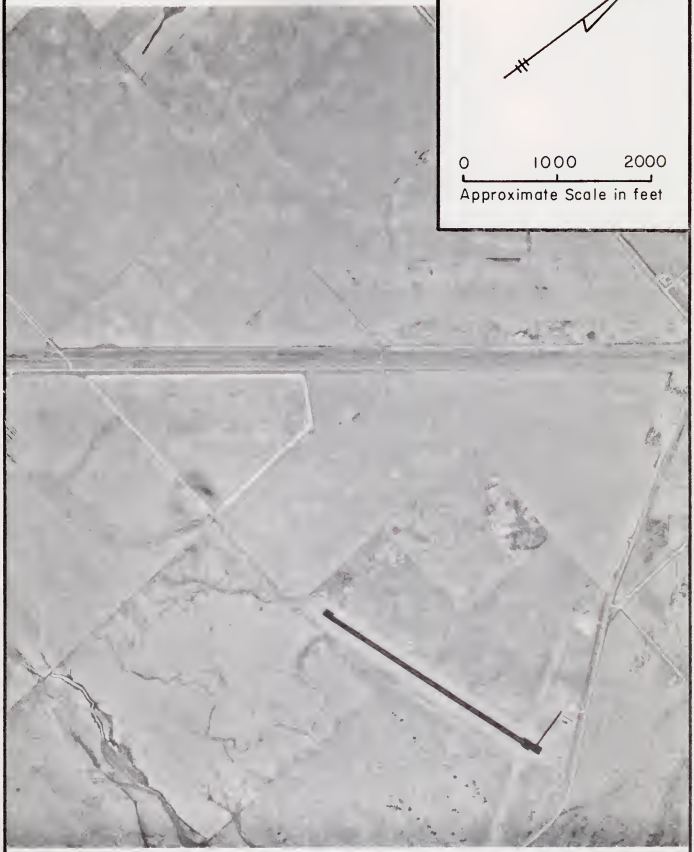
AIRCRAFT MIX AND CAPACITY FORECASTS

	1972	1977	1982	1987	1992
AIRCRAFT TYPE *A*	0	0	0	0	0
AIRCRAFT TYPE *B*	0	0	0	0	0
AIRCRAFT TYPE *C*	0	0	0	1	2
AIRCRAFT TYPE *D+E*	100	100	100	99	98
HOURLY CAPACITY VFR	77	88	99	99	99
HOURLY CAPACITY IFR	0	0	0	0	0
ANNUAL CAPACITY(000)	107	122	138	138	138

DEVELOPMENT COST SUMMARY

PLAN PERIOD	PARTICIPATION	LAND SIDE	AIR SIDE	TOTAL
BEFORE 1977	FEDERAL	$	$	$
	STATE/LOCAL		56,000	56,000
	TOTAL		56,000	56,000
1977	FEDERAL			
	STATE/LOCAL	5,000		5,000
	TOTAL	5,000		5,000
1982	FEDERAL			
	STATE/LOCAL			
	TOTAL			
1987	FEDERAL			
	STATE/LOCAL	1,000		1,000
	TOTAL	1,000		1,000
1992	FEDERAL			
	STATE/LOCAL	1,000		1,000
	TOTAL	1,000		1,000
TOTAL COSTS TO 1992	FEDERAL			
	STATE/LOCAL	7,000	56,000	63,000
	TOTAL	7,000	56,000	63,000

BIG SANDY



MSASP AIRFIELD DEVELOPMENT COSTS IN THOUSANDS OF 1972 DOLLARS

BIG SANDY

	FED SHARE	TOTAL	FED GRANTS	STATE/LOCAL
BEFORE 1977				
1 EXTEND RUNWAY(6/24)				
A EARTHWORK	0.00	9.45	0.00	9.45
B LAND ACQUISITION	0.00	2.84	0.00	2.84
C EASEMENTS	0.00	0.80	0.00	0.80
D SITE PREP	0.00	9.40	0.00	9.40
E DRAINAGE	0.00	0.50	0.00	0.50
F PAVING	0.00	29.40	0.00	29.40
2 LANDING AIDS				
A EXTEND LIGHTING SYSTEM	0.00	3.85	0.00	3.85
TOTAL ($000)		56.07	0.03	56.07
TOTAL PROJECT COSTS		56.07	0.03	56.07

FEDERAL SHARE OF THE PROJECT COSTS

	FED SHARE	1977	1982	1987	1992
1 GA TERMINAL BUILDING AREA(SF)	0.00	0.	0.	0.	0.
2 GA AIRCRAFT LOADING POSITIONS(NUMBER)	0.00	0.	0.	0.	0.
3 GA AC LOADING & BYPASS APRON AREA(SY)	0.00	0.	0.	0.	0.
4 ITINERANT AIRCRAFT PARKING AREA(SY)	0.00	0.	0.	0.	0.
5 GA BASED AIRCRAFT TIE-DOWN AREA(SY)	0.00	0.	0.	0.	0.
6 GA CONV HANGAR BLDG AND APRON AREA(SY)	0.00	0.	0.	0.	0.
7 GA *T* HANGAR BLDG & APRON AREA(SY)	0.00	0.	0.	0.	0.
8 GA PUBLIC VEHICULAR PARKING SPACE(NO.)	0.00	0.	0.	0.	0.
9 GA PUBLIC VEHICULAR PARKIMG AREA(SY)	0.00	0.	0.	0.	0.
10 AIRPORT MAINTENANCE APRON AREA(SY)	0.00	0.	0.	0.	0.
11 AIRPORT MAINTENANCE BUILDING(SF)	0.00	0.	0.	0.	0.
TOTAL IN THOUSANDS OF DOLLARS		0.0	0.0	0.0	0.0

PROJECT COST LESS FEDERAL GRANTS

	FED SHARE	1977	1982	1987	1992
1 GA TERMINAL BUILDING AREA(SF)	0.00	0.	0.	0.	0.
2 GA AIRCRAFT LOADING POSITIONS(NUMBER)	0.00	0.	0.	0.	0.
3 GA AC LOADING & BYPASS APRON AREA(SY)	0.00	0.	0.	0.	0.
4 ITINERANT AIRCRAFT PARKING AREA(SY)	0.00	0.	0.	0.	0.
5 GA BASED AIRCRAFT TIE-DOWN AREA(SY)	0.00	1578.	0.	525.	0.
6 GA CONV HANGAR BLDG ANO APRON AREA(SY)	0.00	1224.	0.	408.	0.
7 GA *T* HANGAR BLDG & APRON AREA(SY)	0.00	0.	0.	0.	0.
8 GA PUBLIC VEHICULAR PARKING SPACE(NO.)	0.00	0.	0.	0.	0.
9 GA PUBLIC VEHICULAR PARKIMG AREA(SY)	0.00	1492.	0.	0.	746.
10 AIRPORT MAINTENANCE APRON AREA(SY)	0.00	360.	36.	23.	61.
11 AIRPORT MAINTENANCE BUILDING(SF)	0.00	100.	10.	7.	17.
TOTAL IN THOUSANDS OF DOLLARS		4.8	0.1	1.0	0.8

BIG TIMBER

The town of Big Timber is between Billings and Bozeman along state route 10. Interstate Route 90 is expected to be completed through Big Timber by 1990. It is situated near national forests to the south and west. Yellowstone National Park is within sixty miles.

The airport is on a hilltop two miles south of town. The access road off rural route 298 is graveled and steep. An estimate for improvement is included. The 'D & E' aircraft type comprise the existing fleet. A few small 'C' type aircraft are expected to use the facility starting in 1982.

Facility Requirements

A moderate amount of expansion will be required. The major portion of land side costs will occur by the 1977 interval. Terminal building area, public vehicular parking, and 'T' hanger building and apron area are the large cost items. The air side addition will consist of a runway overlay by 1987. All items and costs may be found on the following pages.

NAVAIDS: An NDB is recommended for installation by 1977, in order to accommodate the IFR demand through 1992.

Name: BIG TIMBER

Site Number:. 12262

County:. SWEETGRASS

Oistrict:. 7

PEAK HOUR IFR AND VFR DEMAND FORECASTS

	1977	1982	1987	1992
BIG TIMBER, MONTANA				
TOTAL PEAK HOUR VFR DEMAND	15.	15.	16.	17.
GA IFR PEAK HOUR DEMAND	1.	1.	1.	2.

OPERATIONAL DATA

DEMAND FORECAST INDICATORS

	1977	1982	1987	1992
1 TOTAL GA ANNUAL OPERATIONS	7000.0	7100.0	7140.0	7570.0
2 GA PEAK HOUR OPERATIONS	15.0	15.0	16.0	17.0
3 PERCENT GA ITINERANT OPERATIONS	30.0	33.0	35.0	37.0
4 BASED AIRCRAFT UNDER 12500 LBS	11.0	12.0	13.0	14.0
5 BASED AIRCRAFT OVER 12500 LBS	0.0	0.0	0.0	0.0

AIRCRAFT MIX AND CAPACITY FORECASTS

	1972	1977	1982	1987	1992
AIRCRAFT TYPE *A*	0	0	0	0	0
AIRCRAFT TYPE *B*	0	0	0	0	0
AIRCRAFT TYPE *C*	0	0	2	4	6
AIRCRAFT TYPE *D+F*	100	100	98	96	94
HOURLY CAPACITY VFR	77	88	99	99	99
HOURLY CAPACITY IFR	0	0	0	0	0
ANNUAL CAPACITY(000)	107	122	138	138	138

DEVELOPMENT COST SUMMARY

PLAN PERIOD	PARTICIPATION	LAND SIDE	AIR SIDE	TOTAL
BEFORE 1977	FEDERAL			
	STATE/LOCAL			
	TOTAL			
1977	FEDERAL	$ 8,000	$ 14,000	$ 22,000
	STATE/LOCAL	23,000	4,000	27,000
	TOTAL	31,000	18,000	49,000
1982	FEDERAL	1,000		1,000
	STATE/LOCAL			
	TOTAL	1,000		1,000
1987	FEDERAL	2,000	77,000	79,000
	STATE/LOCAL	2,000	20,000	22,000
	TOTAL	4,000	97,000	101,000
1992	FEDERAL	1,000		1,000
	STATE/LOCAL	2,000		2,000
	TOTAL	3,000		3,000
TOTAL COSTS TO 1992	FEDERAL	12,000	91,000	103,000
	STATE/LOCAL	27,000	24,000	51,000
	TOTAL	39,000	115,000	154,000

BIG TIMBER

MSASP AIRFIELD DEVELOPMENT COSTS IN THOUSANDS OF 1972 DOLLARS

BIG TIMBER

AIRSIDE

	FED SHARE	TOTAL	FED GRANTS	STATE/LOCAL
1977				
1 NAVAIDS				
A NDB	79.46	8.00	6.35	1.64
2 IMPROVE ACCESS ROAD	79.46	10.00	7.94	2.05
TOTAL ($000)		18.01	14.31	3.70
1987				
3 RUNWAY OVERLAY	79.46	97.00	77.07	19.92
TOTAL ($000)		97.00	77.08	19.92
TOTAL PROJECT COSTS		115.01	91.39	23.63

LANDSIDE

FEDERAL SHARE OF THE PROJECT COSTS

	FED SHARE	1977	1982	1987	1992
1 GA TERMINAL BUILDING AREA(SF)	0.00	0.	0.	0.	0.
2 GA AIRCRAFT LOADING POSITIONS(NUMBER)	0.00	0.	0.	0.	0.
3 GA AC LOADING & BYPASS APRON AREA(SY)	79.46	0.	0.	0.	0.
4 ITINERANT AIRCRAFT PARKING AREA(SY)	79.46	0.	0.	1168.	0.
5 GA BASED AIRCRAFT TIE-DOWN AREA(SY)	79.46	3971.	417.	417.	417.
6 GA CONV HANGAR BLDG AND APRON AREA(SY)	79.46	0.	0.	0.	0.
7 GA *T* HANGAR BLDG & APRON AREA(SY)	79.46	3541.	322.	322.	322.
8 GA PUBLIC VEHICULAR PARKING SPACE(NO.)	0.00	0.	0.	0.	0.
9 GA PUBLIC VEHICULAR PARKING AREA(SY)	0.00	0.	0.	0.	0.
10 AIRPORT MAINTENANCE APRON AREA(SY)	79.46	357.	14.	6.	61.
11 AIRPORT MAINTENANCE BUILDING(SF)	0.00	0.	0.	0.	0.
TOTAL IN THOUSANDS OF DOLLARS		7.9	0.8	1.9	0.8

PROJECT COST LESS FEDERAL GRANTS

	FED SHARE	1977	1982	1987	1992
1 GA TERMINAL BUILDING AREA(SF)	0.00	9150.	0.	810.	810.
2 GA AIRCRAFT LOADING POSITIONS(NUMBER)	0.00	0.	0.	0.	0.
3 GA AC LOADING & BYPASS APRON AREA(SY)	79.46	0.	0.	0.	0.
4 ITINERANT AIRCRAFT PARKING AREA(SY)	79.46	0.	0.	302.	0.
5 GA BASED AIRCRAFT TIE-DOWN AREA(SY)	79.46	1026.	107.	107.	107.
6 GA CONV HANGAR BLDG AND APRON AREA(SY)	79.46	0.	0.	0.	0.
7 GA *T* HANGAR BLDG & APRON AREA(SY)	79.46	3144.	286.	286.	286.
8 GA PUBLIC VEHICULAR PARKING SPACE(NO.)	0.00	0.	0.	0.	0.
9 GA PUBLIC VEHICULAR PARKING AREA(SY)	0.00	9877.	0.	748.	748.
10 AIRPORT MAINTENANCE APRON AREA(SY)	79.46	92.	3.	1.	16.
11 AIRPORT MAINTENANCE BUILDING(SF)	0.00	0.	0.	0.	0.
TOTAL IN THOUSANDS OF DOLLARS		23.3	0.4	2.3	2.0

BOULDER

The town of Boulder is situated in the mountainous and forested area of western Montana between Helena and Butte along U. S. Route 91. Interstate Route 15 should be completed through Boulder by 1980.

The airport is located 2.5 miles south of town off Montana Route 281. Only 'D & E' aircraft type are expected to use this facility.

Facility Requirements

Only small additions will be needed at the present facility. Since the effective gradient of the present runway is 3.1%, the cost of correcting this facility to the required gradient was too high to be considered. Therefore, an estimate for a new site is included. Items and costs are found on the following pages.

Name: BOULDER

Site Number:. 12274.1

County:. JEFFERSON

District:. 8

PEAK HOUR IFR AND VFR DEMAND FORECASTS

	1977	1982	1987	1992
BOULDER, MONTANA				
TOTAL PEAK HOUR VFR DEMAND	4.	4.	5.	5.
GA IFR PEAK HOUR DEMAND	0.	0.	0.	1.

OPERATIONAL DATA

DEMAND FORECAST INDICATORS

	1977	1982	1987	1992
1 TOTAL GA ANNUAL OPERATIONS	1600.0	1700.0	2000.0	2200.0
2 GA PEAK HOUR OPERATIONS	4.0	4.0	5.0	5.0
3 PERCENT GA ITINERANT OPERATIONS	95.0	90.0	85.0	80.0
4 BASED AIRCRAFT UNDER 12500 LBS	1.0	1.0	2.0	2.0
5 BASED AIRCRAFT OVER 12500 LBS	0.0	0.0	0.0	0.0

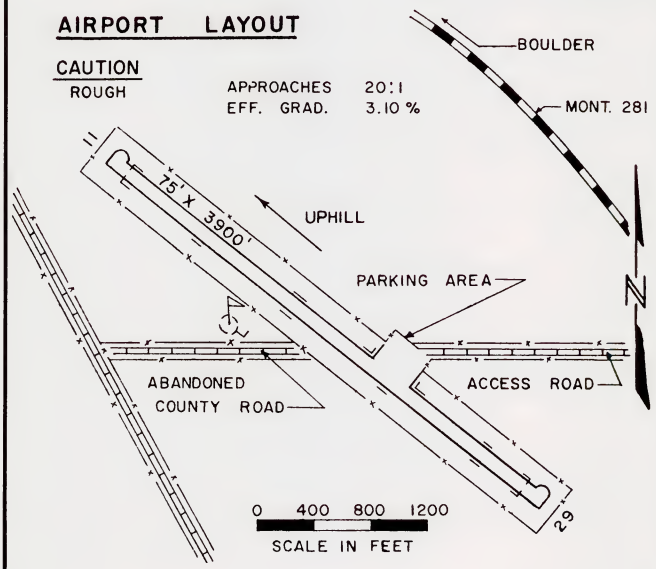
AIRCRAFT MIX AND CAPACITY FORECASTS

	1972	1977	1982	1987	1992
AIRCRAFT TYPE *A*	0	0	0	0	0
AIRCRAFT TYPE *B*	0	0	0	0	0
AIRCRAFT TYPE *C*	0	0	0	0	0
AIRCRAFT TYPE *D-E*	100	100	100	100	100
HOURLY CAPACITY VFR	85	92	99	99	99
HOURLY CAPACITY IFR	0	0	0	0	0
ANNUAL CAPACITY(000)	118	128	138	138	138

DEVELOPMENT COST SUMMARY

PLAN PERIOD	PARTICIPATION	LAND SIDE	AIR SIDE	TOTAL
BEFORE 1977	FEDERAL	$	$	$
	STATE/LOCAL		8,000	8,000
	TOTAL		8,000	8,000
1977	FEDERAL			
	STATE/LOCAL	5,000		5,000
	TOTAL	5,000		5,000
1982	FEDERAL			
	STATE/LOCAL			
	TOTAL			
1987	FEDERAL	3,000	67,000	70,000
	STATE/LOCAL	2,000	87,000	89,000
	TOTAL	5,000	154,000	159,000
1992	FEDERAL			
	STATE/LOCAL			
	TOTAL			
TOTAL COSTS TO 1992	FEDERAL	3,000	67,000	70,000
	STATE/LOCAL	7,000	95,000	102,000
	TOTAL	10,000	162,000	172,000

BOULDER


AIRPORT LAYOUT
CAUTION
ROUGH
APPROACHES 20:1
EFF. GRAD. 3.10 %
BOULDER
MONT. 281
11
75' X 3900'
UPHILL
PARKING AREA
N
ABANDONED
COUNTY ROAD
ACCESS ROAD
29
0 400 800 1200
SCALE IN FEET

MSASP AIRFIELD DEVELOPMENT COSTS IN THOUSANDS OF 1972 DOLLARS

BOULDER

AIRSIDE

	FED SHARE	TOTAL	FED GRANTS	STATE/LOCAL
BEFORE 1977				
1 EXTEND LANDING STRIP				
A LAND ACQUISITION	0.00	4.02	0.00	4.02
B EASEMENTS	0.00	0.80	0.00	0.80
C SITE PREP	0.00	3.12	0.00	3.12
TOTAL ($000)		7.95	0.01	7.95
1987				
2 NEW AIRPORT				
A LAND ACQUISTION	79.46	10.20	8.10	2.09
B SITE PREPARATION	79.46	20.40	16.20	4.19
C DRAINAGE	79.46	12.00	9.53	2.46
D ACCESS ROAD	0.00	70.00	0.00	70.00
E ITIN.AIRC. PARKING	79.46	1.62	1.28	0.33
F AUTO PARKING	79.46	1.61	1.27	0.33
3 LANDING AID				
A MIRL	79.46	31.50	25.02	6.47
B BEACON	79.46	5.00	3.97	1.02
4 UTILITIES	79.46	2.00	1.58	0.41
TOTAL ($000)		154.37	67.05	87.36
TOTAL PROJECT COSTS		162.32	67.06	95.32

LANDSIDE

FEDERAL SHARE OF THE PROJECT COSTS

	FED SHARE	1977	1982	1987	1992
1 GA TERMINAL BUILDING AREA(SF)	0.00	0.	0.	0.	0.
2 GA AIRCRAFT LOADING POSITIONS(NUMBER)	0.00	0.	0.	0.	0.
3 GA AC LOADING & BYPASS APRON AREA(SY)	79.46	0.	0.	810.	0.
4 ITINERANT AIRCRAFT PARKING AREA(SY)	79.46	0.	0.	1144.	0.
5 GA BASED AIRCRAFT TIE-DOWN AREA(SY)	79.46	0.	0.	417.	0.
6 GA CONV HANGAR BLDG AND APRON AREA(SY)	79.46	0.	0.	162.	0.
7 GA *T* HANGAR BLDG & APRON AREA(SY)	79.46	0.	0.	161.	0.
8 GA PUBLIC VEHICULAR PARKING SPACE(NO.)	0.00	0.	0.	0.	0.
9 GA PUBLIC VEHICULAR PARKING AREA(SY)	0.00	0.	0.	0.	0.
10 AIRPORT MAINTENANCE APRON AREA(SY)	79.46	0.	0.	21.	14.
11 AIRPORT MAINTENANCE BUILDING(SF)	0.00	0.	0.	0.	0.
TOTAL IN THOUSANDS OF DOLLARS		0.0	0.0	2.7	0.0

PROJECT COST LESS FEDERAL GRANTS

	FED SHARE	1977	1982	1987	1992
1 GA TERMINAL BUILDING AREA(SF)	0.00	0.	0.	0.	0.
2 GA AIRCRAFT LOADING POSITIONS(NUMBER)	0.00	0.	0.	0.	0.
3 GA AC LOADING & BYPASS APRON AREA(SY)	79.46	1020.	0.	209.	0.
4 ITINERANT AIRCRAFT PARKING AREA(SY)	79.46	0.	0.	295.	0.
5 GA BASED AIRCRAFT TIE-DOWN AREA(SY)	79.46	528.	0.	107.	0.
6 GA CONV HANGAR BLDG AND APRON AREA(SY)	79.46	408.	0.	246.	0.
7 GA *T* HANGAR BLDG & APRON AREA(SY)	79.46	408.	0.	447.	0.
8 GA PUBLIC VEHICULAR PARKING SPACE(NO.)	0.00	0.	0.	0.	0.
9 GA PUBLIC VEHICULAR PARKING AREA(SY)	0.00	2245.	0.	748.	0.
10 AIRPORT MAINTENANCE APRON AREA(SY)	79.46	144.	9.	5.	3.
11 AIRPORT MAINTENANCE BUILDING(SF)	0.00	40.	2.	8.	5.
TOTAL IN THOUSANDS OF DOLLARS		5.0	0.0	2.1	0.0

BRIDGER

Bridger is located in southern Montana 40 miles south of Billings along U. S. Route 310. The airport is adjacent to the west side of town. The existing and future aircraft fleet are 'D & E' aircraft type.

Facility Requirements

A small amount of addition should be made to the land side facilities. However, the runway should be extended a considerable length. Cost and items are found on the following pages.

NAVAIDS: No IFR demand is forecasted before 1992. In view of the terrain obstructions immediately west of the airport, it is recommended that the purchase of any approach aid be deferred until after 1987.

Name: BRIDGER

Site Number: 12279

County: CARBON

District: 7

PEAK HOUR IFR AND VFR DEMAND FORECASTS

	1977	1982	1987	1992
BRIDGER, MONTANA				
TOTAL PEAK HOUR VFR DEMAND	4.	4.	5.	5.
GA IFR PEAK HOUR DEMAND	0.	0.	0.	1.

OPERATIONAL DATA

DEMAND FORECAST INDICATORS	1977	1982	1987	1992
1 TOTAL GA ANNUAL OPERATIONS	1660.0	1670.0	2000.0	2000.0
2 GA PEAK HOUR OPERATIONS	4.0	4.0	5.0	5.0
3 PERCENT GA ITINERANT OPERATIONS	30.0	30.0	30.0	30.0
4 BASED AIRCRAFT UNDER 12500 LBS	3.0	3.0	3.0	3.0
5 BASED AIRCRAFT OVER 12500 LBS	0.0	0.0	0.0	0.0

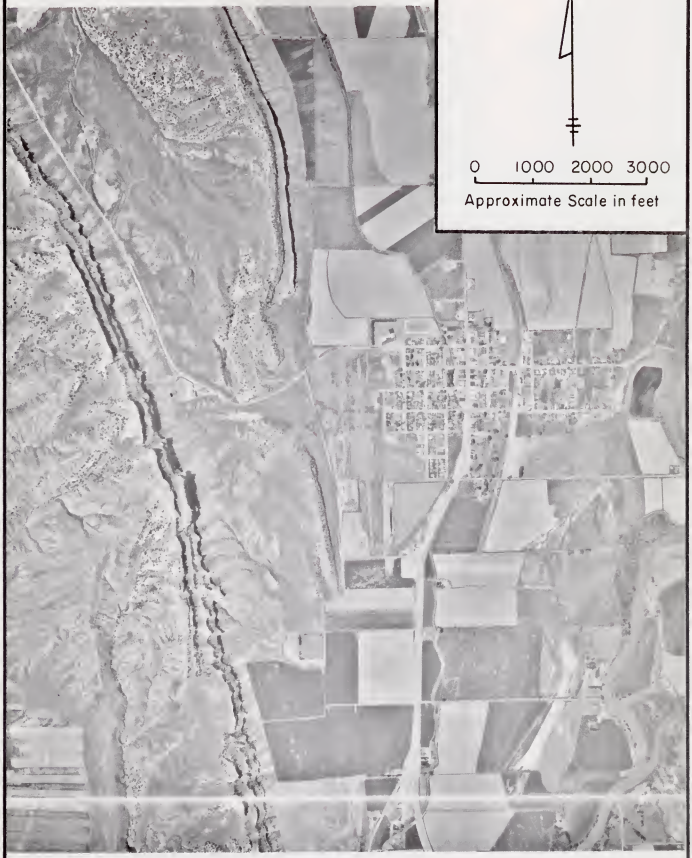
AIRCRAFT MIX AND CAPACITY FORECASTS

	1972	1977	1982	1987	1992
AIRCRAFT TYPE *A*	0	0	0	0	0
AIRCRAFT TYPE *B*	0	0	0	0	0
AIRCRAFT TYPE *C*	0	0	0	0	0
AIRCRAFT TYPE *D+E*	100	100	100	100	100
HOURLY CAPACITY VFR	77	88	99	99	99
HOURLY CAPACITY IFR	0	0	0	0	0
ANNUAL CAPACITY(000)	107	122	138	138	138

DEVELOPMENT COST SUMMARY

PLAN PERIOD	PARTICIPATION	LAND SIDE	AIR SIDE	TOTAL
BEFORE 1977	FEDERAL	$	$	$
	STATE/LOCAL		82,000	82,000
	TOTAL		82,000	82,000
1977	FEDERAL			
	STATE/LOCAL	7,000		7,000
	TOTAL	7,000		7,000
1982	FEDERAL			
	STATE/LOCAL			
	TOTAL			
1987	FEDERAL			
	STATE/LOCAL	1,000		1,000
	TOTAL	1,000		1,000
1992	FEDERAL			
	STATE/LOCAL			
	TOTAL			
TOTAL COSTS TO 1992	FEDERAL			
	STATE/LOCAL	8,000	82,000	90,000
	TOTAL	8,000	82,000	90,000

BRIDGER



MS&SP AIRFIELD DEVELOPMENT COSTS IN THOUSANDS OF 1972 DOLLARS

BRIDGER

	FED SHARE	TOTAL	FED GRANTS	STATE/LOCAL
BEFORE 1977				
1 EXTEND RUNWAY(16/34)				
A EARTHWORK	0.00	22.50	0.00	22.50
B LAND ACQUISITION	0.00	1.86	0.00	1.86
C EASEMENTS	0.00	0.80	0.00	0.80
D SITE PREP	0.00	4.20	0.00	4.20
E PAVING	0.00	46.60	0.00	46.60
2 LANDING AIDS				
A EXTEND LIGHTING	0.00	6.30	0.00	6.30
TOTAL ($000)		82.28	0.02	82.28
TOTAL PROJECT COSTS		82.28	0.02	82.28

DESIRED

FEDERAL SHARE OF THE PROJECT COSTS

	FED SHARE	1977	1982	1987	1992
1 GA TERMINAL BUILDING AREA(SF)	0.00	0.	0.	0.	0.
2 GA AIRCRAFT LOADING POSITIONS(NUMBER)	0.00	0.	0.	0.	0.
3 GA AC LOADING & BYPASS APRON AREA(SY)	0.00	0.	0.	0.	0.
4 ITINERANT AIRCRAFT PARKING AREA(SY)	0.00	0.	0.	0.	0.
5 GA BASED AIRCRAFT TIE-DOWN AREA(SY)	0.00	0.	0.	0.	0.
6 GA CONV HANGAR BLDG AND APRON AREA(SY)	0.00	0.	0.	0.	0.
7 GA *T* HANGAR BLDG & APRON AREA(SY)	0.00	0.	0.	0.	0.
8 GA PUBLIC VEHICULAR PARKING SPACE(NO.)	0.00	0.	0.	0.	0.
9 GA PUBLIC VEHICULAR PARKING AREA(SY)	0.00	0.	0.	0.	0.
10 AIRPORT MAINTENANCE APRON AREA(SY)	0.00	0.	0.	0.	0.
11 AIRPORT MAINTENANCE BUILDING(SF)	0.00	0.	0.	0.	0.
TOTAL IN THOUSANDS OF DOLLARS		0.	0.0	0.0	0.0

LAND SIDE

PROJECT COST LESS FEDERAL GRANTS

	FED SHARE	1977	1982	1987	1992
1 GA TERMINAL BUILDING AREA(SF)	0.00	0.	0.	0.	0.
2 GA AIRCRAFT LOADING POSITIONS(NUMBER)	0.00	0.	0.	0.	0.
3 GA AC LOADING & BYPASS APRON AREA(SY)	0.00	0.	0.	0.	0.
4 ITINERANT AIRCRAFT PARKING AREA(SY)	0.00	0.	0.	0.	0.
5 GA BASED AIRCRAFT TIE-DOWN AREA(SY)	0.00	177.00	0.	0.	0.
6 GA CONV HANGAR BLDG AND APRON AREA(SY)	0.00	0.	0.	0.	0.
7 GA *T* HANGAR BLDG & APRON AREA(SY)	0.00	212.00	0.	0.	0.
8 GA PUBLIC VEHICULAR PARKING SPACE(NO.)	0.00	0.	0.	0.	0.
9 GA PUBLIC VEHICULAR PARKING AREA(SY)	0.00	232.00	0.	7.8.	0.
10 AIRPORT MAINTENANCE APRON AREA(SY)	0.00	29.8.00	0.	12.	0.
11 AIRPORT MAINTENANCE BUILDING(SF)	0.00	83.00	0.	17.	0.
TOTAL IN THOUSANDS OF DOLLARS		6.6	0.0	0.8	0.0

BROADUS - BROADUS

The town of Broadus is situated in southeastern Montana 75 miles south of Miles City and 20 miles east of Custer National Forest on U. S. Route 212.

The airport is located just south of town one-half mile off U.S. Route 212. The existing aircraft are of type "D & E'. Some small 'C' aircraft type activity should not present a problem to the rural environment.

Facility Requirements

A small amount of land side addition is necessary. The present runway should be extended before 1977. See the following pages for costs.

NAVAIDS: The present NDB will be able to accommodate the forecasted IFR through 1992.

Name: BROADUS

Site Number: 12280.11

County: POWDER RIVER

District: 3

PEAK HOUR IFR AND VFR DEMAND FORECASTS

	1977	1982	1987	1992
BROADUS, MONTANA				
TOTAL PEAK HOUR VFR DEMAND	9.	10.	10.	11.
GA IFR PEAK HOUR DEMAND	0.	1.	1.	1.

OPERATIONAL DATA

DEMAND FORECAST INDICATORS

	1977	1982	1987	1992
1 TOTAL GA ANNUAL OPERATIONS	4000.0	4330.0	4670.0	5000.0
2 GA PEAK HOUR OPERATIONS	9.0	10.0	10.0	11.0
3 PERCENT GA ITINERANT OPERATIONS	30.0	30.0	30.0	30.0
4 BASED AIRCRAFT UNDER 12500 LBS	5.0	6.0	7.0	8.0
5 BASED AIRCRAFT OVER 12500 LBS	0.0	0.0	0.0	0.0

AIRCRAFT MIX AND CAPACITY FORECASTS

	1972	1977	1982	1987	1992
AIRCRAFT TYPE *A*	0	0	0	0	0
AIRCRAFT TYPE *B*	0	0	0	0	0
AIRCRAFT TYPE *C*	0	1	2	3	4
AIRCRAFT TYPE *D+E*	100	99	98	97	96
HOURLY CAPACITY VFR	77	88	99	99	99
HOURLY CAPACITY IFR	0	52	52	52	52
ANNUAL CAPACITY(000)	107	122	138	138	138

DEVELOPMENT COST SUMMARY

PLAN PERIOD	PARTICIPATION	LAND SIDE	AIR SIDE	TOTAL
BEFORE 1977	FEDERAL	$	$ 124,000	$ 124,000
	STATE/LOCAL		32,000	32,000
	TOTAL		156,000	156,000
1977	FEDERAL	1,000		1,000
	STATE/LOCAL	7,000		7,000
	TOTAL	8,000		8,000
1982	FEDERAL			
	STATE/LOCAL	1,000		1,000
	TOTAL	1,000		1,000
1987	FEDERAL			
	STATE/LOCAL			
	TOTAL			
1992	FEDERAL	1,000		1,000
	STATE/LOCAL	1,000		1,000
	TOTAL	2,000		2,000
TOTAL COSTS TO 1992	FEDERAL	2,000	124,000	126,000
	STATE/LOCAL	9,000	32,000	41,000
	TOTAL	11,000	156,000	167,000

BROADUS

MSASP AIRFIELD DEVELOPMENT COSTS IN THOUSANDS OF 1972 DOLLARS

BROADUS, BROADUS

	FED SHARE	TOTAL	FED GRANTS	STATE/LOCAL
BEFORE 1977				
1 EXTEND RUNWAY(11/29)				
A EARTHWORK	79.46	4.50	3.57	0.92
B LAND ACQUISITION	79.46	10.00	7.94	2.05
C EASEMENTS	79.46	1.20	0.95	0.24
D SITE PREP	79.46	2.40	1.90	0.49
E OBSTRUCTION REMOVAL	79.46	1.00	0.79	0.20
F DRAINAGE	79.46	1.20	0.95	0.24
G PAVING	79.46	33.40	26.53	6.86
2 LANDING AIDS				
A EXTEND LIGHTING SYSTEM	79.46	2.80	2.22	0.57
3 WIDEN,STRENGTHEN RW, NON PARA + HOLD APRON,ETC	79.46	100.00	79.45	20.54
TOTAL ($000)		156.54	124.39	32.19
TOTAL PROJECT COSTS		156.54	124.39	32.19

AIRSIDE

FEDERAL SHARE OF THE PROJECT COSTS

	FED SHARE	1977	1982	1987	1992
1 GA TERMINAL BUILDING AREA(SF)	0.00	0.	0.	0.	0.
2 GA AIRCRAFT LOADING POSITIONS(NUMBER)	0.00	0.	0.	0.	0.
3 GA AC LOADING & BYPASS APRON AREA(SY)	79.46	0.	0.	0.	0.
4 ITINERANT AIRCRAFT PARKING AREA(SY)	79.46	0.	0.	0.	524.
5 GA BASED AIRCRAFT TIE-DOWN AREA(SY)	79.46	0.	0.	0.	145.
6 GA CONV HANGAR BLDG AND APRON AREA(SY)	79.46	810.	162.	162.	162.
7 GA *T* HANGAR BLDG & APRON AREA(SY)	79.46	0.	0.	0.	0.
8 GA PUBLIC VEHICULAR PARKING SPACE(NO.)	0.00	0.	0.	0.	0.
9 GA PUBLIC VEHICULAR PARKING AREA(SY)	0.00	0.	0.	0.	0.
10 AIRPORT MAINTENANCE APRON AREA(SY)	79.46	572.	47.	49.	47.
11 AIRPORT MAINTENANCE BUILDING(SF)	0.00	0.	0.	0.	0.
TOTAL IN THOUSANDS OF DOLLARS		1.4	0.2	0.2	0.9

LANDSIDE

PROJECT COST LESS FEDERAL GRANTS

	FED SHARE	1977	1982	1987	1992
1 GA TERMINAL BUILDING AREA(SF)	0.00	0.	0.	0.	0.
2 GA AIRCRAFT LOADING POSITIONS(NUMBER)	0.00	0.	0.	0.	0.
3 GA AC LOADING & BYPASS APRON AREA(SY)	79.46	0.	0.	0.	0.
4 ITINERANT AIRCRAFT PARKING AREA(SY)	79.46	0.	0.	0.	135.
5 GA BASED AIRCRAFT TIE-DOWN AREA(SY)	79.46	0.	0.	0.	37.
6 GA CONV HANGAR BLDG AND APRON AREA(SY)	79.46	1229.	246.	246.	246.
7 GA *T* HANGAR BLDG & APRON AREA(SY)	79.46	0.	0.	0.	0.
8 GA PUBLIC VEHICULAR PARKING SPACE(NO.)	0.00	0.	0.	0.	0.
9 GA PUBLIC VEHICULAR PARKING AREA(SY)	0.00	4936.	748.	0.	748.
10 AIRPORT MAINTENANCE APRON AREA(SY)	79.46	147.	12.	12.	12.
11 AIRPORT MAINTENANCE BUILDING(SF)	0.00	200.	17.	17.	16.
TOTAL IN THOUSANDS OF DOLLARS		6.5	1.0	0.3	1.2

BROWNING

The town of Browning is in northwest Montana within the Blackfeet Indian Reservation, and 15 miles east of Glacier National Park. U. S. Routes 2 and 89 comprise a good road system into and out of the town. Rail passenger service is provided by Amtrak to Cut Bank and Glacier Park.

The Starr-Browning airport is located 10 miles northwest of town, and one mile north of the Starr school off county road 445. Only 'D & E' aircraft type is forecasted.

Facility Requirements

A moderate amount of land side expansion should be completed by 1977. Air side addition before 1977 will include runway extension, a MIRL system, and a beacon. Another large cost item will be getting power to the facility for the lighting system.

NAVAIDS: An NDB should be installed by 1987, in order to accommodate the IFR demand for the remainder of the period.

Name: BROWNING

Site Number: 12283.1

County: GLACIER

District: 5

PEAK HOUR IFR AND VFR DEMAND FORECASTS

	1977	1982	1987	1992
BROWNING, MONTANA				
TOTAL PEAK HOUR VFR DEMAND	6.	6.	7.	8.
GA IFR PEAK HOUR DEMAND	0.	0.	1.	1.

OPERATIONAL DATA

DEMAND FORECAST INDICATORS	1977	1982	1987	1992
1 TOTAL GA ANNUAL OPERATIONS	2600.0	2900.0	3300.0	3700.0
2 GA PEAK HOUR OPERATIONS	6.0	6.0	7.0	8.0
3 PERCENT GA ITINERANT OPERATIONS	88.0	86.0	84.0	82.0
4 BASED AIRCRAFT UNDER 12500 LBS	2.0	2.0	3.0	4.0
5 BASED AIRCRAFT OVER 12500 LBS	0.0	0.0	0.0	0.0

AIRCRAFT MIX AND CAPACITY FORECASTS

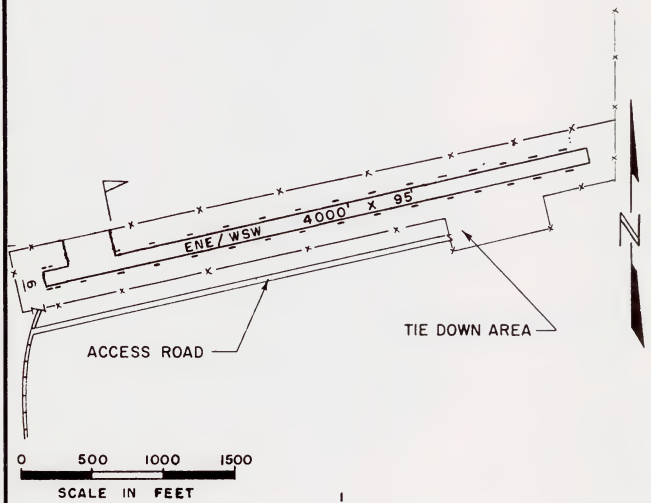
	1972	1977	1982	1987	1992
AIRCRAFT TYPE *A*	0	0	0	0	0
AIRCRAFT TYPE *B*	0	0	0	0	0
AIRCRAFT TYPE *C*	0	0	0	0	0
AIRCRAFT TYPE *D+E*	100	100	100	100	100
HOURLY CAPACITY VFR	85	92	99	99	99
HOURLY CAPACITY IFR	0	0	0	0	0
ANNUAL CAPACITY(000)	118	128	138	138	138

DEVELOPMENT COST SUMMARY

PLAN PERIOD	PARTICIPATION	LAND SIDE	AIR SIDE	TOTAL
BEFORE 1977	FEDERAL	$	$ 53,000	$ 53,000
	STATE/LOCAL		14,000	14,000
	TOTAL		67,000	67,000
1977	FEDERAL	7,000		7,000
	STATE/LOCAL	7,000		7,000
	TOTAL	14,000		14,000
1982	FEDERAL			
	STATE/LOCAL			
	TOTAL			
1987	FEDERAL	1,000	6,000	7,000
	STATE/LOCAL	1,000	2,000	3,000
	TOTAL	2,000	8,000	10,000
1992	FEDERAL	1,000		1,000
	STATE/LOCAL	1,000		1,000
	TOTAL	2,000		2,000
TOTAL COSTS TO 1992	FEDERAL	9,000	59,000	68,000
	STATE/LOCAL	9,000	16,000	25,000
	TOTAL	18,000	75,000	93,000

BROWNING

AIRPORT LAYOUT



MSASP AIRFIELD DEVELOPMENT COSTS IN THOUSANDS OF 1972 DOLLARS

BROWNING

SEASIDE

	FED SHARE	TOTAL	FED GRANTS	STATE/LOCAL
BEFORE 1977				
1 EXTEND RUNWAY(6/24)				
A EARTHWORK	79.46	1.50	1.19	0.30
B LAND ACQUISITION	79.46	3.60	2.86	0.73
C EASEMENTS	79.46	1.20	0.95	0.24
D SITE PREP	79.46	6.10	4.84	1.25
2 LANDING AIDS				
A MIRL	79.46	29.40	23.36	6.03
B BEACON	79.46	5.00	3.97	1.02
4 UTILITIES				
A POWER	79.46	20.00	15.89	4.10
TOTAL ($000)		66.83	53.11	13.75
1987				
3 NAVAIDS				
A NDB	79.46	8.00	6.35	1.64
TOTAL ($000)		8.00	6.36	1.64
TOTAL PROJECT COSTS		74.83	59.47	15.40

LANDSIDE

FEDERAL SHARE OF THE PROJECT COSTS

	FED SHARE	1977	1982	1987	1992
1 GA TERMINAL BUILDING AREA(SF)	0.00	0.	0.	0.	0.
2 GA AIRCRAFT LOADING POSITIONS(NUMBER)	0.00	0.	0.	0.	0.
3 GA AC LOADING & BYPASS APRON AREA(SY)	79.46	2431.	0.	0.	0.
4 ITINERANT AIRCRAFT PARKING AREA(SY)	79.46	3647.	0.	0.	0.
5 GA BASED AIRCRAFT TIE-DOWN AREA(SY)	79.46	0.	0.	0.	384.
6 GA CONV HANGAR BLDG AND APRON AREA(SY)	79.46	324.	0.	162.	162.
7 GA *T* HANGAR BLDG & APRON AREA(SY)	79.46	644.	0.	322.	322.
8 GA PUBLIC VEHICULAR PARKING SPACE(NO.)	0.00	0.	0.	0.	0.
9 GA PUBLIC VEHICULAR PARKING AREA(SY)	0.00	0.	0.	0.	0.
10 AIRPORT MAINTENANCE APRON AREA(SY)	79.46	372.	43.	57.	57.
11 AIRPORT MAINTENANCE BUILDING(SF)	0.00	0.	0.	0.	0.
TOTAL IN THOUSANDS OF DOLLARS		7.4	0.0	0.5	0.9

PROJECT COST LESS FEDERAL GRANTS

	FED SHARE	1977	1982	1987	1992
1 GA TERMINAL BUILDING AREA(SF)	0.00	0.	0.	0.	0.
2 GA AIRCRAFT LOADING POSITIONS(NUMBER)	0.00	0.	0.	0.	0.
3 GA AC LOADING & BYPASS APRON AREA(SY)	79.46	626.	0.	0.	0.
4 ITINERANT AIRCRAFT PARKING AREA(SY)	79.46	942.	0.	0.	0.
5 GA BASED AIRCRAFT TIE-DOWN AREA(SY)	79.46	0.	0.	0.	99.
6 GA CONV HANGAR BLDG AND APRON AREA(SY)	79.46	492.	0.	246.	246.
7 GA *T* HANGAR BLDG & APRON AREA(SY)	79.46	571.	0.	286.	286.
8 GA PUBLIC VEHICULAR PARKING SPACE(NO.)	0.00	0.	0.	0.	0.
9 GA PUBLIC VEHICULAR PARKING AREA(SY)	0.00	4491.	0.	748.	748.
10 AIRPORT MAINTENANCE APRON AREA(SY)	79.46	96.	11.	14.	14.
11 AIRPORT MAINTENANCE BUILDING(SF)	0.00	130.	15.	20.	20.
TOTAL IN THOUSANDS OF DOLLARS		7.4	0.0	1.3	1.4

CHESTER

Chester is situated in the plains area of northern Montana, 57 miles west of Havre along U. S. Route 2. The airport is adjacent to the west side of town.

The existing air fleet are aircraft type 'D & E'. However, small 'C' type aircraft are expected in 1977 and in future years the number will increase. This increase in activity may present a problem to the environment. Therefore, restrictive zoning should be considered to insure community developments compatible with the airport.

Facility Requirements

A moderate expansion program is needed throughout the forecast period. Terminal building area and public vehicular parking area are the larger land side cost items. Extension of the runway before 1977, and a runway overlay in 1982 comprise the air side addition.

NAVAIDS: An NDB is recommended by 1977 to provide the capability necessary to handle the IFR peak hour demand through 1992.

Name: CHESTER

Site Number:. 12293

County:. LIBERTY

District:. 4

PEAK HOUR IFR AND VFR DEMAND FORECASTS

	1977	1982	1987	1992
CHESTER, MONTANA				
TOTAL PEAK HOUR VFR DEMAND	10.	12.	13.	15.
GA IFR PEAK HOUR DEMAND	1.	1.	1.	2.

OPERATIONAL DATA

DEMAND FORECAST INDICATORS

	1977	1982	1987	1992
1 TOTAL GA ANNUAL OPERATIONS	4670.0	5330.0	5760.0	6670.0
2 GA PEAK HOUR OPERATIONS	10.0	12.0	13.0	15.0
3 PERCENT GA ITINERANT OPERATIONS	30.0	30.0	30.0	30.0
4 BASED AIRCRAFT UNDER 12500 LBS	9.0	10.0	11.0	12.0
5 BASED AIRCRAFT OVER 12500 LBS	0.0	0.0	0.0	0.0

AIRCRAFT MIX AND CAPACITY FORECASTS

	1972	1977	1982	1987	1992
AIRCRAFT TYPE *A*	0	0	0	0	0
AIRCRAFT TYPE *B*	0	0	0	0	0
AIRCRAFT TYPE *C*	0	2	5	7	9
AIRCRAFT TYPE *D-E*	100	98	95	93	91
HOURLY CAPACITY VFR	77	88	99	99	99
HOURLY CAPACITY IFR	0	0	0	0	0
ANNUAL CAPACITY(000)	107	122	138	138	138

DEVELOPMENT COST SUMMARY

PLAN PERIOD	PARTICIPATION	LAND SIDE	AIR SIDE	TOTAL
BEFORE 1977	FEDERAL	$	$ 38,000	$ 38,000
	STATE/LOCAL		10,000	10,000
	TOTAL		48,000	48,000
1977	FEDERAL	2,000		2,000
	STATE/LOCAL	7,000		7,000
	TOTAL	9,000		9,000
1982	FEDERAL	1,000	60,000	61,000
	STATE/LOCAL	13,000	15,000	28,000
	TOTAL	14,000	75,000	89,000
1987	FEDERAL			
	STATE/LOCAL	2,000		2,000
	TOTAL	2,000		2,000
1992	FEDERAL			
	STATE/LOCAL	3,000		3,000
	TOTAL	3,000		3,000
TOTAL COSTS TO 1992	FEDERAL	3,000	98,000	101,000
	STATE/LOCAL	25,000	25,000	50,000
	TOTAL	28,000	123,000	151,000

CHESTER

MSASP AIRFIELD DEVELOPMENT COSTS IN THOUSANDS OF 1972 DOLLARS

CHESTER

	FED SHARE	TOTAL	FED GRANTS	STATE/LOCAL
BEFORE 1977				
1 EXTEND RUNWAY(7/25)				
A EARTHWORK	79.46	3.60	2.86	0.73
B LAND ACQUISITION	79.46	1.86	1.47	0.38
C EASEMENTS	79.46	0.60	0.47	0.12
D SITE PREP	79.46	4.20	3.33	0.86
E OBSTRUCTION REMOVAL	79.46	0.40	0.31	0.08
F PAVING	79.46	26.70	21.21	5.48
2 LANDING AIDS				
A EXTEND LIGHTING SYSTEM	79.46	2.80	2.22	0.57
3 NAVAIDS				
A NDB	79.46	8.00	6.35	1.64
TOTAL ($000)		48.19	38.30	9.93
1982				
4 RUNWAY OVERLAY	79.46	75.00	59.59	15.40
TOTAL ($000)		75.00	59.59	15.41
TOTAL PROJECT COSTS		123.20	97.90	25.34

FEDERAL SHARE OF THE PROJECT COSTS

	FED SHARE	1977	1982	1987	1992
1 GA TERMINAL BUILDING AREA(SF)	0.00	0.	0.	0.	0.
2 GA AIRCRAFT LOADING POSITIONS(NUMBER)	0.00	0.	0.	0.	0.
3 GA AC LOADING & BYPASS APRON AREA(SY)	79.46	0.	0.	0.	0.
4 ITINERANT AIRCRAFT PARKING AREA(SY)	79.46	1216.	1216.	0.	0.
5 GA BASED AIRCRAFT TIE-DOWN AREA(SY)	79.46	0.	0.	0.	0.
6 GA CONV HANGAR BLDG AND APRON AREA(SY)	79.46	0.	0.	0.	0.
7 GA *T* HANGAR BLDG & APRON AREA(SY)	79.46	0.	0.	0.	0.
8 GA PUBLIC VEHICULAR PARKING SPACE(NO.)	0.00	0.	0.	0.	0.
9 GA PUBLIC VEHICULAR PARKIMG AREA(SY)	0.00	0.	0.	0.	0.
10 AIRPORT MAINTENANCE APRON AREA(SY)	79.46	668.	94.	61.	130.
11 AIRPORT MAINTENANCE BUILDING(SF)	0.00	0.	0.	0.	0.
TOTAL IN THOUSANDS OF DOLLARS		1.9	1.3	0.1	0.1

PROJECT COST LESS FEDERAL GRANTS

	FED SHARE	1977	1982	1987	1992
1 GA TERMINAL BUILDING AREA(SF)	0.00	0.	10720.	810.	1620.
2 GA AIRCRAFT LOADING POSITIONS(NUMBER)	0.00	0.	0.	0.	0.
3 GA AC LOADING & BYPASS APRON AREA(SY)	79.46	0.	0.	0.	0.
4 ITINERANT AIRCRAFT PARKING AREA(SY)	79.46	314.	314.	0.	0.
5 GA BASED AIRCRAFT TIE-DOWN AREA(SY)	79.46	0.	0.	0.	0.
6 GA CONV HANGAR BLDG AND APRON AREA(SY)	79.46	0.	0.	0.	0.
7 GA *T* HANGAR BLDG & APRON AREA(SY)	79.46	0.	0.	0.	0.
8 GA PUBLIC VEHICULAR PARKING SPACE(NO.)	0.00	0.	0.	0.	0.
9 GA PUBLIC VEHICULAR PARKIMG AREA(SY)	0.00	6584.	1497.	748.	1497.
10 AIRPORT MAINTENANCE APRON AREA(SY)	79.46	172.	24.	16.	33.
11 AIRPORT MAINTENANCE BUILDING(SF)	0.00	234.	33.	22.	46.
TOTAL IN THOUSANDS OF DOLLARS		7.3	12.6	1.6	3.2

AIRSIDE

LANDSIDE

CHINOOK

The city of Chinook is situated in northern Montana 21 miles east of Havre on U. S. Route 2. The airport is adjacent to the west side of town.

The type of aircraft using the facility are small private planes (D&E). Small 'C' type aircraft are expected by 1982. Operations to and from the east pose an environmental problem and restrictive zoning should be considered.

Facility Requirements

A large amount of improvement should be made early in the forecast period. Terminal building area and public vehicular parking area are the large land side items. For air side clearance requirements a moderate amount of building space must be relocated.

NAVAIDS: An NDB is recommended for installation by 1977, in order to handle the IFR peak hour demand through 1992.

Name: CHINOOK

Site Number:. 12295.1

County:. BLAINE

District:. 4

PEAK HOUR IFR AND VFR DEMAND FORECASTS

	1977	1982	1987	1992
CHINOOK, MONTANA				
TOTAL PEAK HOUR VFR DEMAND	19.	20.	21.	22.
GA IFR PEAK HOUR DEMAND	1.	1.	2.	2.

OPERATIONAL DATA

DEMAND FORECAST INDICATORS

	1977	1982	1987	1992
1 TOTAL GA ANNUAL OPERATIONS	8670.0	9060.0	9470.0	10000.0
2 GA PEAK HOUR OPERATIONS	19.0	20.0	21.0	22.0
3 PERCENT GA ITINERANT OPERATIONS	30.0	32.0	33.0	34.0
4 BASED AIRCRAFT UNDER 12500 LBS	14.0	15.0	16.0	17.0
5 BASED AIRCRAFT OVER 12500 LBS	0.0	0.0	0.0	0.0

AIRCRAFT MIX AND CAPACITY FORECASTS

	1972	1977	1982	1987	1992
AIRCRAFT TYPE *A*	0	0	0	0	0
AIRCRAFT TYPE *B*	0	0	0	0	0
AIRCRAFT TYPE *C*	0	0	2	3	4
AIRCRAFT TYPE *D+E*	100	100	98	97	96
HOURLY CAPACITY VFR	77	88	99	99	99
HOURLY CAPACITY IFR	0	0	0	0	0
ANNUAL CAPACITY(000)	107	122	138	138	138

DEVELOPMENT COST SUMMARY

PLAN PERIOD	PARTICIPATION	LAND SIDE	AIR SIDE	TOTAL
BEFORE 1977	FEDERAL	$	$ 10,000	$ 10,000
	STATE/LOCAL		3,000	3,000
	TOTAL		13,000	13,000
1977	FEDERAL	8,000	6,000	14,000
	STATE/LOCAL	28,000	2,000	30,000
	TOTAL	36,000	8,000	44,000
1982	FEDERAL	1,000		1,000
	STATE/LOCAL	2,000		2,000
	TOTAL	3,000		3,000
1987	FEDERAL	1,000		1,000
	STATE/LOCAL	2,000		2,000
	TOTAL	3,000		3,000
1992	FEDERAL	2,000		2,000
	STATE/LOCAL	2,000		2,000
	TOTAL	4,000		4,000
TOTAL COSTS TO 1992	FEDERAL	12,000	16,000	28,000
	STATE/LOCAL	34,000	5,000	39,000
	TOTAL	46,000	21,000	67,000

CHINOOK

MSASP AIRFIELD DEVELOPMENT COSTS IN THOUSANDS OF 1972 DOLLARS

CHINOOK

AIRSIDE

	FED SHARE	TOTAL	FED GRANTS	STATE/LOCAL
BEFORE 1977				
1 OBSTRUCTION REMOVAL				
A MOVE BUILDINGS	79.46	12.50	9.93	2.56
TOTAL ($000)		12.50	9.93	2.57
1977				
2 NAVAIDS				
A NDB	79.46	8.00	6.35	1.64
TOTAL ($000)		8.00	6.36	1.64
TOTAL PROJECT COSTS		20.51	16.29	4.22

LANDSIDE

FEDERAL SHARE OF THE PROJECT COSTS

	FED SHARE	1977	1982	1987	1992
1 GA TERMINAL BUILDING AREA(SF)	0.00	0.	0.	0.	0.
2 GA AIRCRAFT LOADING POSITIONS(NUMBER)	0.00	0.	0.	0.	0.
3 GA AC LOADING & BYPASS APRON AREA(SY)	79.46	0.	0.	0.	0.
4 ITINERANT AIRCRAFT PARKING AREA(SY)	79.46	1073.	0.	0.	1216.
5 GA BASED AIRCRAFT TIE-DOWN AREA(SY)	79.46	5223.	417.	417.	417.
6 GA CONV HANGAR BLDG AND APRON AREA(SY)	79.46	0.	0.	0.	0.
7 GA *T* HANGAR BLDG & APRON AREA(SY)	79.46	0.	0.	0.	0.
8 GA PUBLIC VEHICULAR PARKING SPACE(NO.)	0.00	0.	0.	0.	0.
9 GA PUBLIC VEHICULAR PARKING AREA(SY)	0.00	0.	0.	0.	0.
10 AIRPORT MAINTENANCE APRON AREA(SY)	79.46	1240.	56.	59.	76.
11 AIRPORT MAINTENANCE BUILDING(SF)	0.00	0.	0.	0.	0.
TOTAL IN THOUSANDS OF DOLLARS		7.5	0.5	0.5	1.7

PROJECT COST LESS FEDERAL GRANTS

	FED SHARE	1977	1982	1987	1992
1 GA TERMINAL BUILDING AREA(SF)	0.00	11890.	810.	810.	810.
2 GA AIRCRAFT LOADING POSITIONS(NUMBER)	0.00	0.	0.	0.	0.
3 GA AC LOADING & BYPASS APRON AREA(SY)	79.46	0.	0.	0.	0.
4 ITINERANT AIRCRAFT PARKING AREA(SY)	79.46	277.	0.	0.	314.
5 GA BASED AIRCRAFT TIE-DOWN AREA(SY)	79.46	1350.	107.	107.	107.
6 GA CONV HANGAR BLDG AND APRON AREA(SY)	79.46	0.	0.	0.	0.
7 GA *T* HANGAR BLDG & APRON AREA(SY)	79.46	0.	0.	0.	0.
8 GA PUBLIC VEHICULAR PARKING SPACE(NO.)	0.00	0.	0.	0.	0.
9 GA PUBLIC VEHICULAR PARKING AREA(SY)	0.00	13680.	748.	748.	748.
10 AIRPORT MAINTENANCE APRON AREA(SY)	79.46	320.	14.	15.	19.
11 AIRPORT MAINTENANCE BUILDING(SF)	0.00	436.	19.	21.	26.
TOTAL IN THOUSANDS OF DOLLARS		28.0	1.7	1.7	2.0

CHOTEAU

This city is located in western Montana 60 miles northwest of Great Falls on U. S. Route 89. The city is also served by U. S. Route 287.

The airport is situated one-half mile northeast of town off county road 221. The current aircraft type is 'D & E', and in 1982 small 'C' type aircraft operations will occur. The activity may present a noise problem to the northern part of the city since operations will occur over this area. Restrictive zoning should be considered to insure community developments compatible with the airport.

Facility Requirements

A moderate amount of work will need to be completed by 1977. The large land side items are G.A. terminal building area and public vehicular parking area. A runway overlay should be made by 1982.

NAVAIDS: An NDB is recommended for installation by 1977 in order to accommodate the IFR peak hour demand.

Name: CHOTEAU

Site Number: 12296

County: TETON

District: 5

PEAK HOUR IFR AND VFR DEMAND FORECASTS

	1977	1982	1987	1992
CHOTEAU, MONTANA				
TOTAL PEAK HOUR VFR DEMAND	12.	13.	13.	14.
GA IFR PEAK HOUR DEMAND	1.	1.	1.	2.

OPERATIONAL DATA

DEMAND FORECAST INDICATORS	1977	1982	1987	1992
1 TOTAL GA ANNUAL OPERATIONS	6000.0	5200.0	5000.0	5670.0
2 GA PEAK HOUR OPERATIONS	12.0	13.0	13.0	14.0
3 PERCENT GA ITINERANT OPERATIONS	20.0	25.0	30.0	30.0
4 BASED AIRCRAFT UNDER 12500 LBS	8.0	8.0	9.0	9.0
5 BASED AIRCRAFT OVER 12500 LBS	0.0	0.0	0.0	0.0

AIRCRAFT MIX AND CAPACITY FORECASTS

	1972	1977	1982	1987	1992
AIRCRAFT TYPE *A*	0	0	0	0	0
AIRCRAFT TYPE *B*	0	0	0	0	0
AIRCRAFT TYPE *C*	0	0	3	6	8
AIRCRAFT TYPE *D+E*	100	100	97	94	92
HOURLY CAPACITY VFR	77	88	99	99	99
HOURLY CAPACITY IFR	0	0	0	0	0
ANNUAL CAPACITY(000)	107	122	138	138	138

DEVELOPMENT COST SUMMARY

PLAN PERIOD	PARTICIPATION	LAND SIDE	AIR SIDE	TOTAL
BEFORE 1977	FEDERAL			
	STATE/LOCAL			
	TOTAL			
1977	FEDERAL	$ 2,000	$ 6,000	$ 8,000
	STATE/LOCAL	16,000	2,000	18,000
	TOTAL	18,000	8,000	26,000
1982	FEDERAL		52,000	52,000
	STATE/LOCAL	2,000	13,000	15,000
	TOTAL	2,000	65,000	67,000
1987	FEDERAL			
	STATE/LOCAL			
	TOTAL			
1992	FEDERAL			
	STATE/LOCAL	2,000		2,000
	TOTAL	2,000		2,000
TOTAL COSTS TO 1992	FEDERAL	2,000	58,000	60,000
	STATE/LOCAL	20,000	15,000	35,000
	TOTAL	22,000	73,000	95,000

CHOTEAU

MSASP AIRFIELD DEVELOPMENT COSTS IN THOUSANDS OF 1972 DOLLARS

CHOTEAU

AIRSIDE

	FED SHARE	TOTAL	FED GRANTS	STATE/LOCAL
1977				
1 NAVAIDS				
A NDB	79.46	8.00	6.35	1.64
TOTAL ($000)		8.00	6.36	1.64
1982				
2 OVERLAY RUNWAY(5/23)	79.46	65.00	51.64	13.35
TOTAL ($000)		65.00	51.65	13.35
TOTAL PROJECT COSTS		73.00	58.01	15.00

LANDSIDE

FEDERAL SHARE OF THE PROJECT COSTS

	FED SHARE	1977	1982	1987	1992
1 GA TERMINAL BUILDING AREA(SF)	0.00	0.	0.	0.	0.
2 GA AIRCRAFT LOADING POSITIONS(NUMBER)	0.00	0.	0.	0.	0.
3 GA AC LOADING & BYPASS APRON AREA(SY)	79.46	0.	0.	0.	0.
4 ITINERANT AIRCRAFT PARKING AREA(SY)	79.46	0.	0.	0.	0.
5 GA BASED AIRCRAFT TIE-DOWN AREA(SY)	79.46	0.	0.	0.	0.
6 GA CONV HANGAR BLDG AND APRON AREA(SY)	79.46	813.	0.	417.	0.
7 GA *T* HANGAR BLDG & APRON AREA(SY)	79.46	0.	0.	0.	0.
8 GA PUBLIC VEHICULAR PARKING SPACE(NO.)	0.00	0.	0.	0.	0.
9 GA PUBLIC VEHICULAR PARKING AREA(SY)	0.00	0.	0.	0.	0.
10 AIRPORT MAINTENANCE APRON AREA(SY)	79.46	858.	0.	0.	96.
11 AIRPORT MAINTENANCE BUILDING(SF)	0.00	0.	0.	0.	0.
TOTAL IN THOUSANDS OF DOLLARS		1.7	0.0	0.4	0.1

PROJECT COST LESS FEDERAL GRANTS

	FED SHARE	1977	1982	1987	1992
1 GA TERMINAL BUILDING AREA(SF)	0.00	8720.	810.	0.	810.
2 GA AIRCRAFT LOADING POSITIONS(NUMBER)	0.00	0.	0.	0.	0.
3 GA AC LOADING & BYPASS APRON AREA(SY)	79.46	0.	0.	0.	0.
4 ITINERANT AIRCRAFT PARKING AREA(SY)	79.46	0.	0.	0.	0.
5 GA BASED AIRCRAFT TIE-DOWN AREA(SY)	79.46	210.	0.	107.	0.
6 GA CONV HANGAR BLDG AND APRON AREA(SY)	79.46	0.	0.	0.	0.
7 GA *T* HANGAR BLDG & APRON AREA(SY)	79.46	0.	0.	0.	0.
8 GA PUBLIC VEHICULAR PARKING SPACE(NO.)	0.00	0.	0.	0.	0.
9 GA PUBLIC VEHICULAR PARKING AREA(SY)	0.00	6281.	748.	0.	748.
10 AIRPORT MAINTENANCE APRON AREA(SY)	79.46	221.	0.	0.	24.
11 AIRPORT MAINTENANCE BUILDING(SF)	0.00	300.	0.	0.	34.
TOTAL IN THOUSANDS OF DOLLARS		15.7	1.6	0.1	1.6

CIRCLE

The town of Circle is situated in the flat agricultural area of east central Montana and is 44 miles northwest of Glendive. Circle is served by State Routes 20 and 13.

The McCone County Airport is located one mile east of town off State Route 20. The existing air fleet is of type 'D & E'.

Facility Requirements

Extensive land side expansion is needed for based aircraft tie-down area and conventional hanger space and apron area throughout the forecast period. Air side addition will consist of a runway extension before 1977.

NAVAIDS: An NDB is recommended for installation by 1987, to accommodate the IFR peak hour demand for the remainder of the forecast period.

Name: CIRCLE

Site Number:. 12298

County:. MC CONE

District:. 2

PEAK HOUR IFR AND VFR DEMAND FORECASTS

	1977	1982	1987	1992
CIRCLE, MONTANA				
TOTAL PEAK HOUR VFR DEMAND	4.	7.	8.	11.
GA IFR PEAK HOUR DEMAND	0.	0.	1.	1.

OPERATIONAL DATA

DEMAND FORECAST INDICATORS

	1977	1982	1987	1992
1 TOTAL GA ANNUAL OPERATIONS	2000.0	3000.0	3640.0	4890.0
2 GA PEAK HOUR OPERATIONS	4.0	7.0	8.0	11.0
3 PERCENT GA ITINERANT OPERATIONS	10.0	10.0	10.0	11.0
4 BASED AIRCRAFT UNDER 12500 LBS	30.0	30.0	33.0	33.0
5 BASED AIRCRAFT OVER 12500 LBS	3.0	4.0	5.0	7.0

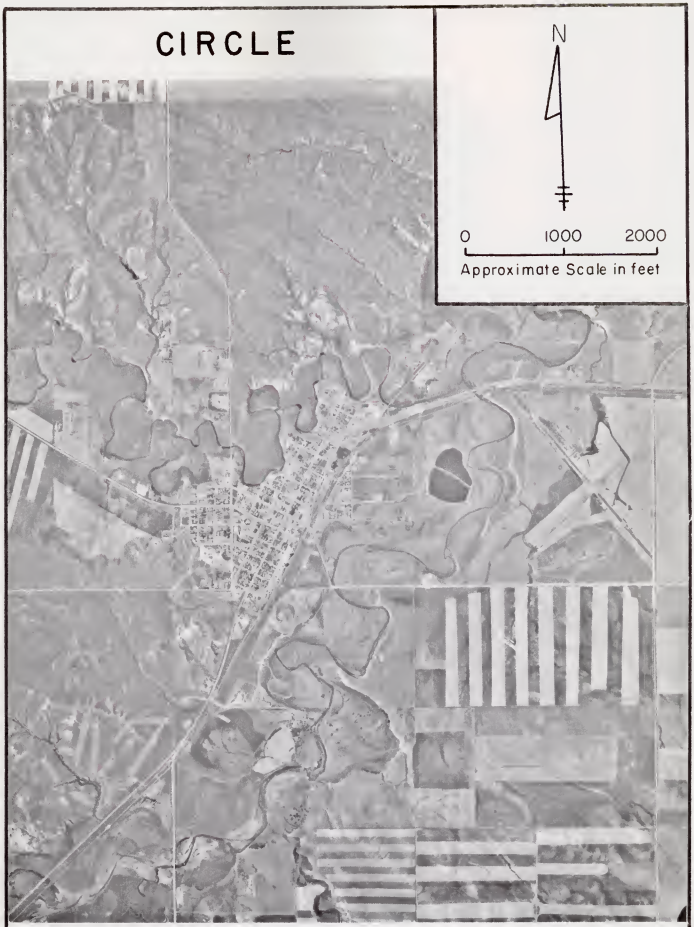
AIRCRAFT MIX AND CAPACITY FORECASTS

	1972	1977	1982	1987	1992
AIRCRAFT TYPE *A*	0	0	0	0	0
AIRCRAFT TYPE *B*	0	0	0	0	0
AIRCRAFT TYPE *C*	0	1	2	3	4
AIRCRAFT TYPE *D+E*	100	99	98	97	96
HOURLY CAPACITY VFR	77	88	99	99	99
HOURLY CAPACITY IFR	0	0	0	0	0
ANNUAL CAPACITY(000)	107	122	138	138	138

DEVELOPMENT COST SUMMARY

PLAN PERIOD	PARTICIPATION	LAND SIDE	AIR SIDE	TOTAL
BEFORE 1977	FEDERAL	$	$ 25,000	$ 25,000
	STATE/LOCAL		11,000	11,000
	TOTAL		36,000	36,000
1977	FEDERAL	28,000		28,000
	STATE/LOCAL	23,000		23,000
	TOTAL	51,000		51,000
1982	FEDERAL	4,000		4,000
	STATE/LOCAL	6,000		6,000
	TOTAL	10,000		10,000
1987	FEDERAL	5,000	6,000	11,000
	STATE/LOCAL	6,000	2,000	8,000
	TOTAL	11,000	8,000	19,000
1992	FEDERAL	7,000		7,000
	STATE/LOCAL	10,000		10,000
	TOTAL	17,000		17,000
TOTAL COSTS TO 1992	FEDERAL	44,000	31,000	75,000
	STATE/LOCAL	45,000	13,000	58,000
	TOTAL	89,000	44,000	133,000

CIRCLE



MSASP AIRFIELD DEVELOPMENT COSTS IN THOUSANDS OF 1972 DOLLARS

AIRSIDE

CIRCLE

	FED SHARE	TOTAL	FED GRANTS	STATE/LOCAL
BEFORE 1977				
1 EXTEND RUNWAY(12/30)				
A EARTHWORK	79.46	3.00	2.38	0.61
B EASEMENTS	79.46	0.60	0.47	0.12
C SITE PREPARATION	79.46	0.20	0.15	0.04
D DRAINAGE	79.46	0.60	0.47	0.12
E PAVING	79.46	26.80	21.29	5.50
2 LANDING AIDS				
A EXTEND LIRL	0.00	4.20	0.00	4.20
TOTAL ($000)		35.43	24.82	10.63
1987				
3 NAVAIDS				
A NDB	79.46	8.00	6.35	1.64
TOTAL ($000)		8.00	6.36	1.64
TOTAL PROJECT COSTS		43.43	31.18	12.28

LANDSIDE

FEDERAL SHARE OF THE PROJECT COSTS

	FED SHARE	1977	1982	1987	1992
1 GA TERMINAL BUILDING AREA(SF)	0.00	0.	0.	0.	0.
2 GA AIRCRAFT LOADING POSITIONS(NUMBER)	0.00	0.	0.	0.	0.
3 GA AC LOADING & BYPASS APRON AREA(SY)	79.46	0.	0.	0.	0.
4 ITINERANT AIRCRAFT PARKING AREA(SY)	79.46	0.	0.	0.	0.
5 GA BASED AIRCRAFT TIE-DOWN AREA(SY)	79.46	15735.	1073.	2324.	2145.
6 GA CONV HANGAR BLDG AND APRON AREA(SY)	79.46	12014.	2383.	2870.	4767.
7 GA *T* HANGAR BLDG & APRON AREA(SY)	79.46	0.	0.	0.	0.
8 GA PUBLIC VEHICULAR PARKING SPACE(NO.)	0.00	0.	0.	0.	0.
9 GA PUBLIC VEHICULAR PARKIMG AREA(SY)	0.00	0.	0.	0.	0.
10 AIRPORT MAINTENANCE APRON AREA(SY)	79.46	286.	143.	91.	173.
11 AIRPORT MAINTENANCE BUILDING(SF)	0.00	0.	0.	0.	0.
TOTAL IN THOUSANDS OF DOLLARS		28.0	3.6	5.3	7.1

PROJECT COST LESS FEDERAL GRANTS

	FED SHARE	1977	1982	1987	1992
1 GA TERMINAL BUILDING AREA(SF)	0.00	0.	0.	0.	0.
2 GA AIRCRAFT LOADING POSITIONS(NUMBER)	0.00	0.	0.	0.	0.
3 GA AC LOADING & BYPASS APRON AREA(SY)	79.46	0.	0.	0.	0.
4 ITINERANT AIRCRAFT PARKING AREA(SY)	79.46	0.	0.	0.	0.
5 GA BASED AIRCRAFT TIE-DOWN AREA(SY)	79.46	4067.	277.	600.	554.
6 GA CONV HANGAR BLDG AND APRON AREA(SY)	79.46	18225.	3616.	4354.	7232.
7 GA *T* HANGAR BLDG & APRON AREA(SY)	79.46	0.	0.	0.	0.
8 GA PUBLIC VEHICULAR PARKING SPACE(NO.)	0.00	0.	0.	0.	0.
9 GA PUBLIC VEHICULAR PARKIMG AREA(SY)	0.00	294.	2245.	748.	2245.
10 AIRPORT MAINTENANCE APRON AREA(SY)	79.46	74.	37.	23.	44.
11 AIRPORT MAINTENANCE BUILDING(SF)	0.00	109.	50.	32.	61.
TOTAL IN THOUSANDS OF DOLLARS		22.8	6.2	5.8	10.1

CLINTON

Clinton is situated in the mountainous area of western Montana 15 miles southeast of Missoula on Interstate 90.

The Eliott Field airport is located five miles south of town off Interstate 90. Only ' D & E' aircraft type is forecasted for this airport. The present landing strip is in the Clark Fork River Canyon, surrounded by obstructions, and is used chiefly as an emergency field.

Facility Requirements

A moderate amount of land side expansion should be completed in the 1977, 1982 and 1992 benchmark periods. Air side addition will consist of a beacon and power installation in 1992.

NAVAIDS: It is recommended that no approach aid be installed due to the terrain restrictions which would obviate any reduction in the basic VFR weather minima.

Name: CLINTON

Site Number: 12298.6

County: MISSOULA

District: 11

PEAK HOUR IFR AND VFR DEMAND FORECASTS

	1977	1982	1987	1992
CLINTON, MONTANA				
TOTAL PEAK HOUR VFR DEMAND	5.	6.	7.	9.
GA IFR PEAK HOUR DEMAND	0.	0.	1.	1.

OPERATIONAL DATA

DEMAND FORECAST INDICATORS	1977	1982	1987	1992
1 TOTAL GA ANNUAL OPERATIONS	1200.0	1400.0	1700.0	2000.0
2 GA PEAK HOUR OPERATIONS	5.0	6.0	7.0	9.0
3 PERCENT GA ITINERANT OPERATIONS	30.0	30.0	30.0	30.0
4 BASED AIRCRAFT UNDER 12500 LBS	1.0	2.0	2.0	3.0
5 BASED AIRCRAFT OVER 12500 LBS	0.0	0.0	0.0	0.0

AIRCRAFT MIX AND CAPACITY FORECASTS

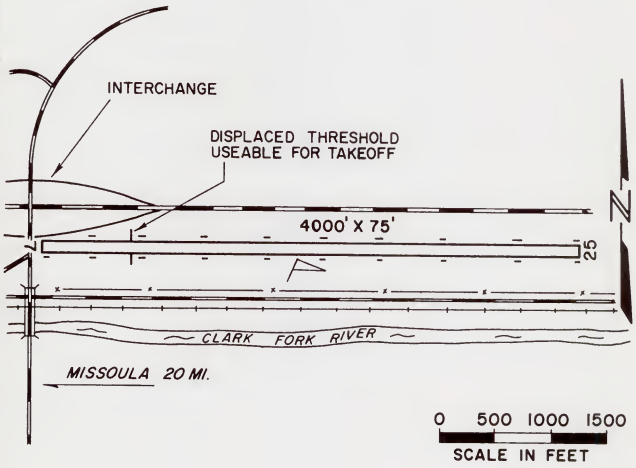
	1972	1977	1982	1987	1992
AIRCRAFT TYPE *A*	0	0	0	0	0
AIRCRAFT TYPE *B*	0	0	0	0	0
AIRCRAFT TYPE *C*	0	0	0	0	0
AIRCRAFT TYPE *D+E*	100	100	100	100	100
HOURLY CAPACITY VFR	85	92	99	99	99
HOURLY CAPACITY IFR	0	0	0	0	0
ANNUAL CAPACITY(000)	118	128	138	138	138

DEVELOPMENT COST SUMMARY

PLAN PERIOD	PARTICIPATION	LAND SIDE	AIR SIDE	TOTAL
BEFORE 1977	FEDERAL			
	STATE/LOCAL			
	TOTAL			
1977	FEDERAL	$	$	$
	STATE/LOCAL	10,000		10,000
	TOTAL	10,000		10,000
1982	FEDERAL			
	STATE/LOCAL	1,000		1,000
	TOTAL	1,000		1,000
1987	FEDERAL			
	STATE/LOCAL	1,000		1,000
	TOTAL	1,000		1,000
1992	FEDERAL			
	STATE/LOCAL	1,000	25,000	26,000
	TOTAL	1,000	25,000	26,000
TOTAL COSTS TO 1992	FEDERAL			
	STATE/LOCAL	13,000	25,000	38,000
	TOTAL	13,000	25,000	38,000

CLINTON

AIRPORT LAYOUT



MSASP AIRFIELD DEVELOPMENT COSTS IN THOUSANDS OF 1972 DOLLARS

CLINTON

		FED SHARE	TOTAL	FED GRANTS	STATE/LOCAL
	1992				
	1 LANDING AIDS				
	A BEACON	0.00	5.00	0.00	5.00
	2 UTILITIES				
	A POWER	0.00	20.00	0.00	20.00
	TOTAL ($000)		25.01	0.01	25.01
	TOTAL PROJECT COSTS		25.01	0.01	25.01

FEDERAL SHARE OF THE PROJECT COSTS

	FED SHARE	1977	1982	1987	1992
1 GA TERMINAL BUILDING AREA(SF)	0.00	0.	0.	0.	0.
2 GA AIRCRAFT LOADING POSITIONS(NUMBER)	0.00	0.	0.	0.	0.
3 GA AC LOADING & BYPASS APRON AREA(SY)	0.00	0.	0.	0.	0.
4 ITINERANT AIRCRAFT PARKING AREA(SY)	0.00	0.	0.	0.	0.
5 GA BASED AIRCRAFT TIE-DOWN AREA(SY)	0.00	0.	0.	0.	0.
6 GA CONV HANGAR BLDG AND APRON AREA(SY)	0.00	0.	0.	0.	0.
7 GA *T* HANGAR BLDG & APRON AREA(SY)	0.00	0.	0.	0.	0.
8 GA PUBLIC VEHICULAR PARKING SPACE(NO.)	0.00	0.	0.	0.	0.
9 GA PUBLIC VEHICULAR PARKING AREA(SY)	0.00	0.	0.	0.	0.
10 AIRPORT MAINTENANCE APRON AREA(SY)	0.00	0.	0.	0.	0.
11 AIRPORT MAINTENANCE BUILDING(SF)	0.00	0.	0.	0.	0.
TOTAL IN THOUSANDS OF DOLLARS		0.0	0.0	0.0	0.0

PROJECT COST LESS FEDERAL GRANTS

	FED SHARE	1977	1982	1987	1992
1 GA TERMINAL BUILDING AREA(SF)	0.00	0.	0.	0.	0.
2 GA AIRCRAFT LOADING POSITIONS(NUMBER)	0.00	0.	0.	0.	0.
3 GA AC LOADING & BYPASS APRON AREA(SY)	0.00	1020.	0.	0.	0.
4 ITINERANT AIRCRAFT PARKING AREA(SY)	0.00	0.	0.	0.	0.
5 GA BASED AIRCRAFT TIE-DOWN AREA(SY)	0.00	2103.	525.	525.	525.
6 GA CONV HANGAR BLDG AND APRON AREA(SY)	0.00	0.	0.	0.	0.
7 GA *T* HANGAR BLDG & APRON AREA(SY)	0.00	0.	0.	0.	0.
8 GA PUBLIC VEHICULAR PARKING SPACE(NO.)	0.00	0.	0.	0.	0.
9 GA PUBLIC VEHICULAR PARKING AREA(SY)	0.00	6134.	0.	0.	0.
10 AIRPORT MAINTENANCE APRON AREA(SY)	0.00	419.	81.	119.	121.
11 AIRPORT MAINTENANCE BUILDING(SF)	0.00	117.	17.	33.	33.
TOTAL IN THOUSANDS OF DOLLARS		9.8	0.6	0.7	0.7

COLUMBUS

The city is located in the plains area of southern Montana 40 miles west of Billings on U.S. Route 10. Interstate 90 should be completed through Columbus by 1980. The airport is located just south of the city and has good access from state route 307.

The existing future air fleet is D' & E' aircraft type, however in 1992 'C' type aircraft are expected. The airport is close to the populated area therefore restrictive zoning should be considered to insure community developments compatible with the environment.

Facility Requirements

A large amount of land side work on terminal building area and public vehicular parking area should be completed by 1977. The runway should be extended before 1977 and overlayed after 1977.

NAVAIDS: An NDB should be installed by 1977, in order to accommodate the IFR peak hour demand.

Name: COLUMBUS

Site Number: 12304

County: STILLWATER

District: 7

PEAK HOUR IFR AND VFR DEMAND FORECASTS

	1977	1982	1987	1992
COLUMBUS, MONTANA				
TOTAL PEAK HOUR VFR DEMAND	18.	20.	21.	22.
GA IFR PEAK HOUR DEMAND	1.	1.	2.	2.

OPERATIONAL DATA

DEMAND FORECAST INDICATORS

	1977	1982	1987	1992
1 TOTAL GA ANNUAL OPERATIONS	8000.0	9000.0	9090.0	10300.0
2 GA PEAK HOUR OPERATIONS	18.0	20.0	21.0	22.0
3 PERCENT GA ITINERANT OPERATIONS	30.0	30.0	33.0	33.0
4 BASED AIRCRAFT UNDER 12500 LBS	11.0	12.0	13.0	15.0
5 BASED AIRCRAFT OVER 12500 LBS	0.0	0.0	0.0	0.0

AIRCRAFT MIX AND CAPACITY FORECASTS

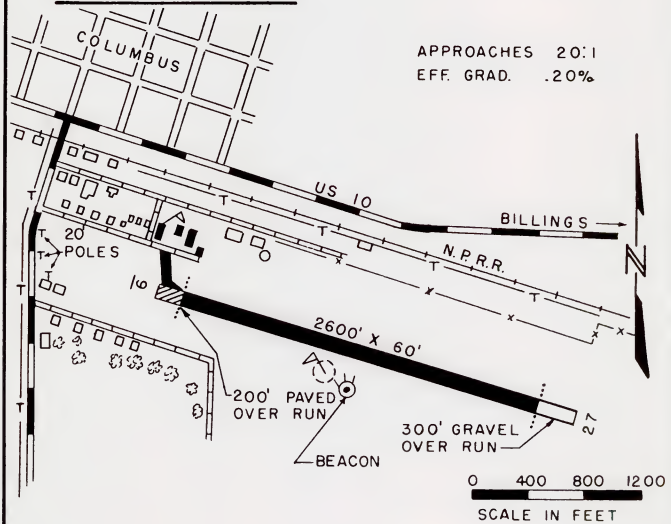
	1972	1977	1982	1987	1992
AIRCRAFT TYPE *A*	0	C	0	0	0
AIRCRAFT TYPE *B*	0	0	0	0	0
AIRCRAFT TYPE *C*	0	0	0	0	1
AIRCRAFT TYPE *D+E*	100	100	100	100	99
HOURLY CAPACITY VFR	85	92	99	99	99
HOURLY CAPACITY IFR	0	0	0	0	0
ANNUAL CAPACITY(000)	118	128	138	138	138

DEVELOPMENT COST SUMMARY

PLAN PERIOD	PARTICIPATION	LAND SIDE	AIR SIDE	TOTAL
BEFORE 1977	FEDERAL	$	$ 19,000	$ 19,000
	STATE/LOCAL		5,000	5,000
	TOTAL		24,000	24,000
1977	FEDERAL	8,000	70,000	78,000
	STATE/LOCAL	24,000	18,000	42,000
	TOTAL	32,000	88,000	120,000
1982	FEDERAL	1,000		1,000
	STATE/LOCAL	3,000		3,000
	TOTAL	4,000		4,000
1987	FEDERAL			
	STATE/LOCAL	2,000		2,000
	TOTAL	2,000		2,000
1992	FEDERAL	2,000		2,000
	STATE/LOCAL	2,000		2,000
	TOTAL	4,000		4,000
TOTAL COSTS TO 1992	FEDERAL	11,000	89,000	100,000
	STATE/LOCAL	31,000	23,000	54,000
	TOTAL	42,000	112,000	154,000

COLUMBUS

AIRPORT LAYOUT



MSASP AIRFIELD DEVELOPMENT COSTS IN THOUSANDS OF 1972 DOLLARS

COLUMBUS

	FED SHARE	TOTAL	FED GRANTS	STATE/LOCAL
BEFORE 1977				
1 EXTEND RUNWAY(9/27)				
A EARTHWORK	79.46	6.60	5.24	1.35
B OBSTRUCTION REMOVAL	79.46	1.00	0.79	0.20
C DRAINAGE	79.46	1.00	0.79	0.20
D PAVING	79.46	7.10	5.64	1.45
2 LANDING AIDS				
A EXTEND LIGHTING SYSTEM	79.46	8.40	6.67	1.72
TOTAL ($000)		24.12	19.17	4.97
1977				
3 NAVAIDS				
A NDB	79.46	8.00	6.35	1.64
4 OVERLAY RUNWAY(9/27)	79.46	80.00	63.56	16.43
TOTAL ($000)		88.01	69.93	18.08
TOTAL PROJECT COSTS		112.13	89.10	23.06

SIDE A

FEDERAL SHARE OF THE PROJECT COSTS

	FED SHARE	1977	1982	1987	1992
1 GA TERMINAL BUILDING AREA(SF)	0.00	0.	0.	0.	0.
2 GA AIRCRAFT LOADING POSITIONS(NUMBER)	0.00	0.	0.	0.	0.
3 GA AC LOADING & BYPASS APRON AREA(SY)	79.46	0.	0.	0.	0.
4 ITINERANT AIRCRAFT PARKING AREA(SY)	79.46	1740.	0.	0.	1216.
5 GA BASED AIRCRAFT TIE-DOWN AREA(SY)	79.46	4591.	417.	417.	834.
6 GA CONV HANGAR BLDG AND APRON AREA(SY)	79.46	0.	0.	0.	0.
7 GA *T* HANGAR BLDG & APRON AREA(SY)	79.46	0.	0.	0.	0.
8 GA PUBLIC VEHICULAR PARKING SPACE(NO.)	0.00	0.	0.	0.	0.
9 GA PUBLIC VEHICULAR PARKIMG AREA(SY)	0.00	0.	0.	0.	0.
10 AIRPORT MAINTENANCE APRON AREA(SY)	79.46	1144.	143.	13.	173.
11 AIRPORT MAINTENANCE BUILDING(SF)	0.00	0.	0.	0.	0.
TOTAL IN THOUSANDS OF DOLLARS		7.5	0.6	0.4	2.2

LANDSIDE

PROJECT COST LESS FEDERAL GRANTS

	FED SHARE	1977	1982	1987	1992
1 GA TERMINAL BUILDING AREA(SF)	0.00	9580.	1620.	810.	810.
2 GA AIRCRAFT LOADING POSITIONS(NUMBER)	0.00	0.	0.	0.	0.
3 GA AC LOADING & BYPASS APRON AREA(SY)	79.46	0.	0.	0.	0.
4 ITINERANT AIRCRAFT PARKING AREA(SY)	79.46	449.	0.	0.	314.
5 GA BASED AIRCRAFT TIE-DOWN AREA(SY)	79.46	1186.	107.	107.	215.
6 GA CONV HANGAR BLDG AND APRON AREA(SY)	79.46	0.	0.	0.	0.
7 GA *T* HANGAR BLDG & APRON AREA(SY)	79.46	0.	0.	0.	0.
8 GA PUBLIC VEHICULAR PARKING SPACE(NO.)	0.00	0.	0.	0.	0.
9 GA PUBLIC VEHICULAR PARKIMG AREA(SY)	0.00	12272.	1497.	748.	748.
10 AIRPORT MAINTENANCE APRON AREA(SY)	79.46	295.	37.	3.	44.
11 AIRPORT MAINTENANCE BUILDING(SF)	0.00	400.	50.	5.	60.
TOTAL IN THOUSANDS OF DOLLARS		24.2	3.3	1.7	2.2

CONDON

The Condon airport is situated in the heavily forested mountainous area of western Montana on State Route 209. It is a U. S. Forest service airport and only light private aircraft is expected.

Facility Requirements

The runway should be lengthened and obstructions removed.

Name: CONDON

Site Number: 12306

County: MISSOULA

District: 11

PEAK HOUR IFR AND VFR DEMAND FORECASTS

	1977	1982	1987	1992
CONDON, MONTANA				
TOTAL PEAK HOUR VFR DEMAND	1.	1.	1.	1.
GA IFR PEAK HOUR DEMAND	0.	0.	0.	0.

OPERATIONAL DATA

DEMAND FORECAST INDICATORS

	1977	1982	1987	1992
1 TOTAL GA ANNUAL OPERATIONS	200.0	200.0	300.0	300.0
2 GA PEAK HOUR OPERATIONS	1.0	1.0	1.0	1.0
3 PERCENT GA ITINERANT OPERATIONS	100.0	100.0	100.0	100.0
4 BASED AIRCRAFT UNDER 12500 LBS	0.0	0.0	0.0	0.0
5 BASED AIRCRAFT OVER 12500 LBS	0.0	0.0	0.0	0.0

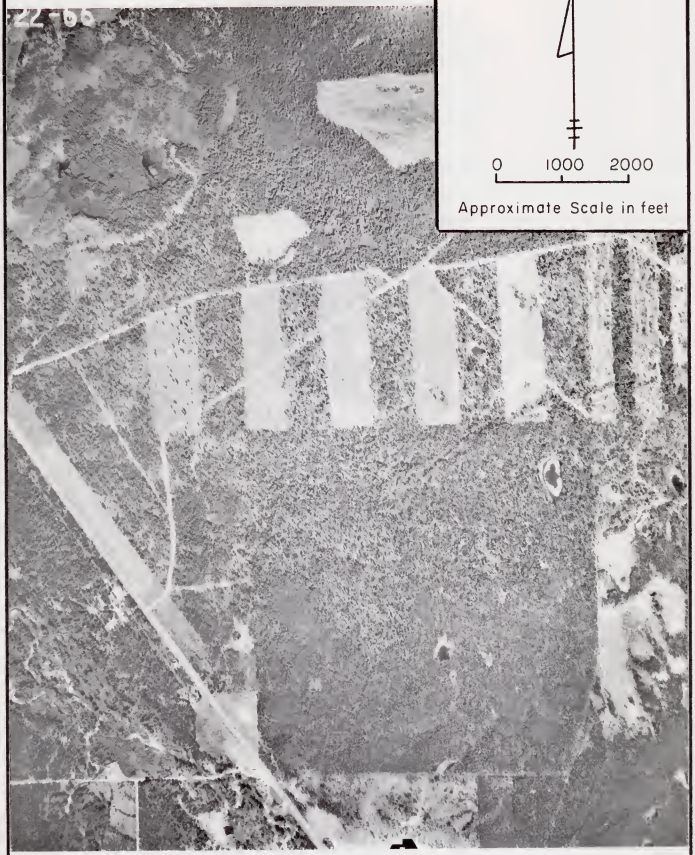
AIRCRAFT MIX AND CAPACITY FORECASTS

	1972	1977	1982	1987	1992
AIRCRAFT TYPE *A*	0	0	0	0	0
AIRCRAFT TYPE *B*	0	0	0	0	0
AIRCRAFT TYPE *C*	0	0	0	0	0
AIRCRAFT TYPE *D+E*	100	100	100	100	100
HOURLY CAPACITY VFR	77	88	99	99	99
HOURLY CAPACITY IFR	0	0	0	0	0
ANNUAL CAPACITY(000)	107	122	138	138	138

DEVELOPMENT COST SUMMARY

PLAN PERIOD	PARTICIPATION	LAND SIDE	AIR SIDE	TOTAL
BEFORE 1977	FEDERAL	$	$ 27,000	$ 27,000
	STATE/LOCAL			
	TOTAL		27,000	27,000
1977	FEDERAL	1,000		1,000
	STATE/LOCAL			
	TOTAL	1,000		1,000
1982	FEDERAL			
	STATE/LOCAL			
	TOTAL			
1987	FEDERAL			
	STATE/LOCAL			
	TOTAL			
1992	FEDERAL			
	STATE/LOCAL			
	TOTAL			
TOTAL COSTS TO 1992	FEDERAL	1,000	27,000	28,000
	STATE/LOCAL			
	TOTAL	1,000	27,000	28,000

CONDON



MSASP AIRFIELD DEVELOPMENT COSTS IN THOUSANDS OF 1972 DOLLARS

CONDON

	FED SHARE	TOTAL	FED GRANTS	STATE/LOCAL
BEFORE 1977				
1 EXTEND RUNWAY(13/31)				
A EARTHWORK	100.00	9.90	9.89	0.00
B SITE PREP	100.00	5.40	5.39	0.00
C OBSTRUCTION REMOVAL	100.00	12.00	12.00	0.00
TOTAL ($000)		27.31	27.31	0.01
TOTAL PROJECT COSTS		27.31	27.31	0.01

SLIDE AREA

FEDERAL SHARE OF THE PROJECT COSTS

	FED SHARE	1977	1982	1987	1992
1 GA TERMINAL BUILDING AREA(SF)	100.00	0.	0.	0.	0.
2 GA AIRCRAFT LOADING POSITIONS(NUMBER)	100.00	0.	0.	0.	0.
3 GA AC LOADING & BYPASS APRON AREA(SY)	100.00	0.	0.	0.	0.
4 ITINERANT AIRCRAFT PARKING AREA(SY)	100.00	0.	0.	0.	0.
5 GA BASED AIRCRAFT TIE-DOWN AREA(SY)	100.00	3.	0.	0.	0.
6 GA CONV HANGAR BLDG AND APRON AREA(SY)	100.00	0.	0.	0.	0.
7 GA *T* HANGAR BLDG & APRON AREA(SY)	100.00	0.	0.	0.	0.
8 GA PUBLIC VEHICULAR PARKING SPACE(NO.)	100.00	0.	0.	0.	0.
9 GA PUBLIC VEHICULAR PARKING AREA(SY)	100.00	748.	0.	0.	0.
10 AIRPORT MAINTENANCE APRON AREA(SY)	100.00	36.	0.	18.	0.
11 AIRPORT MAINTENANCE BUILDING(SF)	100.00	10.	0.	5.	0.
TOTAL IN THOUSANDS OF DOLLARS		0.8	0.0	0.0	0.0

SLIDE AND SLIDE

PROJECT COST LESS FEDERAL GRANTS

	FED SHARE	1977	1982	1987	1992
1 GA TERMINAL BUILDING AREA(SF)	100.00	0.	0.	0.	0.
2 GA AIRCRAFT LOADING POSITIONS(NUMBER)	100.00	0.	0.	0.	0.
3 GA AC LOADING & BYPASS APRON AREA(SY)	100.00	0.	0.	0.	0.
4 ITINERANT AIRCRAFT PARKING AREA(SY)	100.00	0.	0.	0.	0.
5 GA BASED AIRCRAFT TIE-DOWN AREA(SY)	100.00	0.	0.	0.	0.
6 GA CONV HANGAR BLDG AND APRON AREA(SY)	100.00	0.	0.	0.	0.
7 GA *T* HANGAR BLDG & APRON AREA(SY)	100.00	0.	0.	0.	0.
8 GA PUBLIC VEHICULAR PARKING SPACE(NO.)	100.00	0.	0.	0.	0.
9 GA PUBLIC VEHICULAR PARKING AREA(SY)	100.00	0.	0.	0.	0.
10 AIRPORT MAINTENANCE APRON AREA(SY)	100.00	0.	0.	0.	0.
11 AIRPORT MAINTENANCE BUILDING(SF)	100.00	0.	0.	0.	0.
TOTAL IN THOUSANDS OF DOLLARS		0.0	0.0	0.0	0.0

CONRAD

The city of Conrad is located in northern Montana on U. S. Route 91; 60 miles north of Great Falls and 40 miles east of the Rocky Mountains. Interstate Route 15 passes one mile to the east.

The airport is approximately one mile east of town. The access is by an unimproved road, but should be adequate. The existing aircraft type are 'D & E'. Type 'C' aircraft are expected in 1977 and will increase through the forecast period.

Facility Requirements

Moderate additions to land side items will be required by 1977. Air side expansion will include a runway extension before 1977 and a runway overlay by 1982. Costs are contained on the following pages.

NAVAIDS: An NDB is recommended for installation by 1977, to accommodate the IFR peak hour demand.

Name: CONRAD

Site Number:. 12308

County:. PONDERA

District:. 5

PEAK HOUR IFR AND VFR DEMAND FORECASTS

	1977	1982	1987	1992
CONRAD, MONTANA				
TOTAL PEAK HOUR VFR DEMAND	14.	15.	17.	19.
GA IFR PEAK HOUR DEMAND	1.	1.	2.	2.

OPERATIONAL DATA

DEMAND FORECAST INDICATORS

	1977	1982	1987	1992
1 TOTAL GA ANNUAL OPERATIONS	6250.0	7000.0	7750.0	8500.0
2 GA PEAK HOUR OPERATIONS	14.0	15.0	17.0	19.0
3 PERCENT GA ITINERANT OPERATIONS	40.0	40.0	40.0	40.0
4 BASED AIRCRAFT UNDER 12500 LBS	12.0	13.0	14.0	15.0
5 BASED AIRCRAFT OVER 12500 LBS	0.0	0.0	0.0	0.0

AIRCRAFT MIX AND CAPACITY FORECASTS

	1972	1977	1982	1987	1992
AIRCRAFT TYPE *A*	0	0	0	0	0
AIRCRAFT TYPE *B*	0	0	0	0	0
AIRCRAFT TYPE *C*	0	3	7	9	15
AIRCRAFT TYPE *D+E*	100	97	93	91	85
HOURLY CAPACITY VFR	77	88	99	99	99
HOURLY CAPACITY IFR	0	0	0	0	0
ANNUAL CAPACITY(000)	107	122	138	138	144

DEVELOPMENT COST SUMMARY

PLAN PERIOD	PARTICIPATION	LAND SIDE	AIR SIDE	TOTAL
BEFORE 1977	FEDERAL	$	$ 14,000	$ 14,000
	STATE/LOCAL		4,000	4,000
	TOTAL		18,000	18,000
1977	FEDERAL	2,000		2,000
	STATE/LOCAL	16,000		16,000
	TOTAL	18,000		18,000
1982	FEDERAL	1,000	238,000	239,000
	STATE/LOCAL	2,000	62,000	64,000
	TOTAL	3,000	300,000	303,000
1987	FEDERAL	1,000		1,000
	STATE/LOCAL	3,000		3,000
	TOTAL	4,000		4,000
1992	FEDERAL	1,000		1,000
	STATE/LOCAL	3,000		3,000
	TOTAL	4,000		4,000
TOTAL COSTS TO 1992	FEDERAL	5,000	252,000	257,000
	STATE/LOCAL	24,000	66,000	90,000
	TOTAL	29,000	318,000	347,000

CONRAD

MSASP AIRFIELD DEVELOPMENT COSTS IN THOUSANDS OF 1972 DOLLARS

CONRAD

		FED SHARE	TOTAL	FED GRANTS	STATE/LOCAL
	BEFORE 1977				
1	EXTEND RUNWAY(5/23)				
	A FARTHWORK	79.46	3.00	2.38	0.61
	B LAND ACQUISITION	79.46	0.30	0.23	0.06
	C EASEMENTS	79.46	0.80	0.63	0.16
	D SITE PREP	79.46	0.60	0.47	0.12
	E DRAINAGE	79.46	2.00	1.58	0.41
	F PAVING	79.46	10.00	7.94	2.05
2	LANDING AIDS				
	A EXTEND LIGHTING SYSTEM	79.46	1.05	0.83	0.21
	TOTAL ($000)		17.78	14.13	3.68
	1982				
4	RECONSTRUCT RW(5/23)	79.46	300.00	238.37	61.62
	TOTAL ($000)		300.00	238.38	61.62
	TOTAL PROJECT COSTS		317.78	252.52	65.30

SIDE

LANDSIDE

FEDERAL SHARE OF THE PROJECT COSTS

	FED SHARE	1977	1982	1987	1992
1 GA TERMINAL BUILDING AREA(SF)	0.00	0.	0.	0.	0.
2 GA AIRCRAFT LOADING POSITIONS(NUMBER)	0.00	0.	0.	0.	0.
3 GA AC LOADING & BYPASS APRON AREA(SY)	79.46	0.	0.	0.	0.
4 ITINERANT AIRCRAFT PARKING AREA(SY)	79.46	0.	0.	0.	0.
5 GA BASED AIRCRAFT TIE-DOWN AREA(SY)	79.46	1194.	417.	417.	417.
6 GA CONV HANGAR BLDG AND APRON AREA(SY)	79.46	0.	0.	0.	0.
7 GA *T* HANGAR BLDG & APRON AREA(SY)	79.46	0.	0.	0.	0.
8 GA PUBLIC VEHICULAR PARKING SPACE(NO.)	0.00	0.	0.	0.	0.
9 GA PUBLIC VEHICULAR PARKING AREA(SY)	0.00	0.	0.	0.	0.
10 AIRPORT MAINTENANCE APRON AREA(SY)	79.46	894.	107.	107.	107.
11 AIRPORT MAINTENANCE BUILDING(SF)	0.00	0.	0.	0.	0.
TOTAL IN THOUSANDS OF DOLLARS		2.1	0.5	0.5	0.5

PROJECT COST LESS FEDERAL GRANTS

	FED SHARE	1977	1982	1987	1992
1 GA TERMINAL BUILDING AREA(SF)	0.00	6140.	810.	1620.	1620.
2 GA AIRCRAFT LOADING POSITIONS(NUMBER)	0.00	0.	0.	0.	0.
3 GA AC LOADING & BYPASS APRON AREA(SY)	79.46	0.	0.	0.	0.
4 ITINERANT AIRCRAFT PARKING AREA(SY)	79.46	0.	0.	0.	0.
5 GA BASED AIRCRAFT TIE-DOWN AREA(SY)	79.46	308.	107.	107.	107.
6 GA CONV HANGAR BLDG AND APRON AREA(SY)	79.46	0.	0.	0.	0.
7 GA *T* HANGAR BLDG & APRON AREA(SY)	79.46	0.	0.	0.	0.
8 GA PUBLIC VEHICULAR PARKING SPACE(NO.)	0.00	0.	0.	0.	0.
9 GA PUBLIC VEHICULAR PARKING AREA(SY)	0.00	8678.	748.	1497.	1497.
10 AIRPORT MAINTENANCE APRON AREA(SY)	79.46	231.	27.	27.	27.
11 AIRPORT MAINTENANCE BUILDING(SF)	0.00	313.	37.	38.	38.
TOTAL IN THOUSANDS OF DOLLARS		15.7	1.7	3.3	3.3

CULBERTSON

The town is situated in northeast Montana five miles east of the Fort Peck Indian Reservation on U. S. Route 2, and 37 miles north of Sidney on Montana Route 16.

The airport is adjacent to the northwest side of town. 'D & E' aircraft type are forecasted for the period

Facility Requirements

Terminal building area, based aircraft tie-down area and public vehicular parking area will be large cost items for the 1977 increment. Only small additions are necessary through the rest of the forecast period.

NAVAIDS: An NDB is recommended for installation by 1977, to accommodate the IFR peak hour demand through 1992.

Name: CULBERTSON

Site Number:. 12311

County:. ROOSEVELT

District:. 5

PEAK HOUR IFR AND VFR DEMAND FORECASTS

	1977	1982	1987	1992
CULBERTSON, MONTANA				
TOTAL PEAK HOUR VFR DEMAND	18.	21.	22.	24.
GA IFR PEAK HOUR DEMAND	1.	1.	2.	3.

OPERATIONAL DATA

DEMAND FORECAST INDICATORS

	1977	1982	1987	1992
1 TOTAL GA ANNUAL OPERATIONS	8750.0	9750.0	11000.0	12900.0
2 GA PEAK HOUR OPERATIONS	18.0	21.0	22.0	24.0
3 PERCENT GA ITINERANT OPERATIONS	40.0	40.0	40.0	40.0
4 BASED AIRCRAFT UNDER 12500 LBS	16.0	18.0	20.0	23.0
5 BASED AIRCRAFT OVER 12500 LBS	0.0	0.0	0.0	1.0

AIRCRAFT MIX AND CAPACITY FORECASTS

	1972	1977	1982	1987	1992
AIRCRAFT TYPE *A*	0	0	0	0	0
AIRCRAFT TYPE *B*	0	0	0	0	0
AIRCRAFT TYPE *C*	0	0	1	2	4
AIRCRAFT TYPE *D+E*	100	100	99	98	96
HOURLY CAPACITY VFR	77	88	99	99	99
HOURLY CAPACITY IFR	0	0	0	0	0
ANNUAL CAPACITY(000)	107	122	138	138	138

DEVELOPMENT COST SUMMARY

PLAN PERIOD	PARTICIPATION	LAND SIDE	AIR SIDE	TOTAL
BEFORE 1977	FEDERAL			
	STATE/LOCAL			
	TOTAL			
1977	FEDERAL	$ 7,000	$ 6,000	$ 13,000
	STATE/LOCAL	30,000	2,000	32,000
	TOTAL	37,000	8,000	45,000
1982	FEDERAL	1,000		1,000
	STATE/LOCAL	5,000		5,000
	TOTAL	6,000		6,000
1987	FEDERAL	1,000	224,000	225,000
	STATE/LOCAL	2,000	68,000	70,000
	TOTAL	3,000	292,000	295,000
1992	FEDERAL	4,000		4,000
	STATE/LOCAL	4,000		4,000
	TOTAL	8,000		8,000
TOTAL COSTS TO 1992	FEDERAL	13,000	230,000	243,000
	STATE/LOCAL	41,000	70,000	111,000
	TOTAL	54,000	300,000	354,000

CULBERTSON

MSASP AIRFIELD DEVELOPMENT COSTS IN THOUSANDS OF 1972 DOLLARS

CULBERTSON

AIRSIDE

	FED SHARE	TOTAL	FED GRANTS	STATE/LOCAL
1977				
1 NAVAIDS				
A NDB	79.46	8.00	6.35	1.64
TOTAL ($000)		8.00	6.36	1.64
1987				
2 EXTEND RUNWAY(7/25)	79.46	120.00	95.35	24.64
3 WIDEN RUNWAY(7/25)	79.46	70.00	55.62	14.37
4 OVERLAY RUNWAY (7/25)	79.46	90.00	71.51	18.48
5 RELOCATE ROAD	0.00	10.00	0.00	10.00
6 OBSTRUCTION REMOVAL	79.46	2.00	1.58	0.41
TOTAL ($000)		292.02	224.10	67.94
TOTAL PROJECT COSTS		300.02	230.46	69.59

LANDSIDE

FEDERAL SHARE OF THE PROJECT COSTS

	FED SHARE	1977	1982	1987	1992
1 GA TERMINAL BUILDING AREA(SF)	0.00	0.	0.	0.	0.
2 GA AIRCRAFT LOADING POSITIONS(NUMBER)	0.00	0.	0.	0.	0.
3 GA AC LOADING & BYPASS APRON AREA(SY)	79.46	0.	0.	0.	1216.
4 ITINERANT AIRCRAFT PARKING AREA(SY)	79.46	381.	0.	834.	2324.
5 GA BASED AIRCRAFT TIE-DOWN AREA(SY)	79.46	6677.	834.	0.	0.
6 GA CONV HANGAR BLDG AND APRON AREA(SY)	79.46	0.	0.	0.	0.
7 GA +T+ HANGAR BLDG & APRON AREA(SY)	0.00	0.	0.	0.	0.
8 GA PUBLIC VEHICULAR PARKING SPACE(NO.)	0.00	0.	0.	0.	0.
9 GA PUBLIC VEHICULAR PARKIMG AREA(SY)	79.46	0.	0.	0.	0.
10 AIRPORT MAINTENANCE APRON AREA(SY)	0.00	0.	0.	0.	0.
11 AIRPORT MAINTENANCE BUILDING(SF)		7.1	0.8	0.8	3.5
TOTAL IN THOUSANDS OF DOLLARS					

PROJECT COST LESS FEDERAL GRANTS

	FED SHARE	1977	1982	1987	1992
1 GA TERMINAL BUILDING AREA(SF)	0.00	1508.	243.	81.	162.
2 GA AIRCRAFT LOADING POSITIONS(NUMBER)	0.00	0.	0.	0.	0.
3 GA AC LOADING & BYPASS APRON AREA(SY)	79.46	0.	0.	0.	314.
4 ITINERANT AIRCRAFT PARKING AREA(SY)	79.46	98.	0.	0.	600.
5 GA BASED AIRCRAFT TIE-DOWN AREA(SY)	79.46	1726.	215.	215.	0.
6 GA CONV HANGAR BLDG AND APRON AREA(SY)	79.46	0.	0.	0.	0.
7 GA +T+ HANGAR BLDG & APRON AREA(SY)	0.00	0.	0.	0.	0.
8 GA PUBLIC VEHICULAR PARKING SPACE(NO.)	0.00	1257.	224.	74.	149.
9 GA PUBLIC VEHICULAR PARKIMG AREA(SY)	79.46	0.	0.	0.	0.
10 AIRPORT MAINTENANCE APRON AREA(SY)	0.00	0.	0.	0.	0.
11 AIRPORT MAINTENANCE BUILDING(SF)		29.5	4.9	1.8	4.0
TOTAL IN THOUSANDS OF DOLLARS					

CUT BANK

The city is situated in northwest Montana immediately to the east of the Blackfeet Indian Reservation and 30 miles south of the Canadian border. Cut Bank is also 23 miles northwest of Shelby on U. S. Route 2. Amtrak provides daily passenger service to Shelby and Browning.

The airport is located two miles southwest of town, one mile south of U. S. Route 2. The 'D & E' aircraft type comprise the existing air fleet. However, beginning in 1977 'C' type aircraft will operate and increase through the forecast period.

Facility Requirements

Based aircraft tie-down area, 'T' hanger building and apron area and public vehicular parking area will require large expansion by 1977. Air side addition will consist of a runway reconstruction before 1977.

Before the costly runway reconstruction is begun, a detailed master plan and/or feasibility study should be completed.

NAVAIDS: The present weather minima is 400/1. The existing VOR and NDB should accommodate the peak hour IFR demand through 1992.

Name: CUT BANK

Site Number: 12315

County: GLACIER

District: 5

PEAK HOUR IFR AND VFR DEMAND FORECASTS

	1977	1982	1987	1992
CUT BANK, MONTANA				
TOTAL PEAK HOUR VFR DEMAND	21.	23.	25.	27.
GA IFR PEAK HOUR DEMAND	1.	2.	2.	3.

OPERATIONAL DATA

DEMAND FORECAST INDICATORS	1977	1982	1987	1992
1 TOTAL GA ANNUAL OPERATIONS	10890.0	11670.0	12600.0	14000.0
2 GA PEAK HOUR OPERATIONS	21.0	23.0	25.0	27.0
3 PERCENT GA ITINERANT OPERATIONS	45.0	48.0	50.0	50.0
4 BASED AIRCRAFT UNDER 12500 LBS	26.0	28.0	30.0	32.0
5 BASED AIRCRAFT OVER 12500 LBS	1.0	1.0	1.0	1.0

AIRCRAFT MIX AND CAPACITY FORECASTS

	1972	1977	1982	1987	1992
AIRCRAFT TYPE *A*	0	0	0	0	0
AIRCRAFT TYPE *B*	0	0	0	0	0
AIRCRAFT TYPE *C*	0	2	6	10	14
AIRCRAFT TYPE *D+E*	100	98	94	90	84
HOURLY CAPACITY VFR	77	88	99	99	99
HOURLY CAPACITY IFR	53	52	52	52	52
ANNUAL CAPACITY(000)	107	122	138	138	147

DEVELOPMENT COST SUMMARY

PLAN PERIOD	PARTICIPATION	LAND SIDE	AIR SIDE	TOTAL
BEFORE 1977	FEDERAL	$	$ 954,000	$ 954,000
	STATE/LOCAL		246,000	246,000
	TOTAL		1,200,000	1,200,000
1977	FEDERAL	20,000		20,000
	STATE/LOCAL	23,000		23,000
	TOTAL	43,000		43,000
1982	FEDERAL	2,000		2,000
	STATE/LOCAL	2,000		2,000
	TOTAL	4,000		4,000
1987	FEDERAL	2,000		2,000
	STATE/LOCAL	4,000		4,000
	TOTAL	6,000		6,000
1992	FEDERAL	2,000		2,000
	STATE/LOCAL	4,000		4,000
	TOTAL	6,000		6,000
TOTAL COSTS TO 1992	FEDERAL	26,000	954,000	980,000
	STATE/LOCAL	33,000	246,000	279,000
	TOTAL	59,000	1,200,000	1,259,000

CUT BANK

MSASP AIRFIELD DEVELOPMENT COSTS IN THOUSANDS OF 1972 DOLLARS

CUT BANK

	FED SHARE	TOTAL	FED GRANTS	STATE/LOCAL
BEFORE 1977				
1 RUNWAY RECONSTRUCTION	79.46	1200.00	953.52	246.48
TOTAL ($000)		1200.00	953.52	246.48
TOTAL PROJECT COSTS		1200.00	953.52	246.48

DESIRES

LANDSIDE

FEDERAL SHARE OF THE PROJECT COSTS

	FED $HARE	1977	1982	1987	1992
1 GA TERMINAL BUILDING AREA(SF)	0.00	0.	0.	0.	0.
2 GA AIRCRAFT LOADING POSITIONS(NUMBER)	0.00	0.	0.	0.	0.
3 GA AC LOADING & BYPASS APRON AREA(SY)	79.46	0.	0.	0.	0.
4 ITINERANT AIRCRAFT PARKING AREA(SY)	79.46	0.	0.	0.	0.
5 GA BASED AIRCRAFT TIE-DOWN AREA(SY)	79.46	11301.	834.	834.	834.
6 GA CONV HANGAR BLDG AND APRON AREA(SY)	79.46	0.	0.	0.	0.
7 GA *T* HANGAR BLDG & APRON AREA(SY)	79.46	8370.	644.	644.	644.
8 GA PUBLIC VEHICULAR PARKING SPACE(NO.)	0.00	0.	0.	0.	0.
9 GA PUBLIC VEHICULAR PARKING AREA(SY)	0.00	0.	0.	0.	0.
10 AIRPORT MAINTENANCE APRON AREA(SY)	79.46	0.	0.	0.	0.
11 AIRPORT MAINTENANCE BUILDING(SF)	0.00	0.	0.	0.	0.
TOTAL IN THOUSANDS OF DOLLARS		19.7	1.5	1.5	1.5

PROJECT COST LESS FEDERAL GRANTS

	FED SHARE	1977	1982	1987	1992
1 GA TERMINAL BUILDING AREA(SF)	0.00	0.	0.	1250.	1620.
2 GA AIRCRAFT LOADING POSITIONS(NUMBER)	0.00	0.	0.	0.	0.
3 GA AC LOADING & BYPASS APRON AREA(SY)	79.46	0.	0.	0.	0.
4 ITINERANT AIRCRAFT PARKING AREA(SY)	79.46	0.	0.	0.	0.
5 GA BASED AIRCRAFT TIE-DOWN AREA(SY)	79.46	2921.	215.	215.	215.
6 GA CONV HANGAR BLDG AND APRON AREA(SY)	79.46	0.	0.	0.	0.
7 GA *T* HANGAR BLDG & APRON AREA(SY)	79.46	7431.	571.	571.	571.
8 GA PUBLIC VEHICULAR PARKING SPACE(NO.)	0.00	0.	0.	0.	0.
9 GA PUBLIC VEHICULAR PARKING AREA(SY)	0.00	12117.	1497.	1497.	1497.
10 AIRPORT MAINTENANCE APRON AREA(SY)	79.46	0.	0.	0.	0.
11 AIRPORT MAINTENANCE BUILDING(SF)	0.00	0.	0.	0.	0.
TOTAL IN THOUSANDS OF DOLLARS		22.5	2.3	3.5	3.9

DEER LODGE

Deer Lodge is situated in the mountainous area of western Montana 35 miles north of Butte on U. S. Route 10 and Interstate 90. Passenger rail service between Butte and Missoula is provided by the Amtrak system.

The airport is located one-half mile west of town. 'D & E' aircraft type is forecasted for the period with small 'C' aircraft operating in 1992.

Facility Requirements

A small amount of land side work is needed for the 1977 increment. The runway, however, should be lengthened considerably before 1977.

NAVAIDS: An NDB is recommended for installation by 1987, to accommodate the IFR peak hour demand through 1992.

Name: DEER LODGE

Site Number: 12318

County: POWELL

District: 12

PEAK HOUR IFR AND VFR DEMAND FORECASTS

	1977	1982	1987	1992
DEER LODGE, MONTANA				
TOTAL PEAK HOUR VFR DEMAND	7.	7.	8.	8.
GA IFR PEAK HOUR DEMAND	0.	0.	1.	1.

OPERATIONAL DATA

DEMAND FORECAST INDICATORS

	1977	1982	1987	1992
1 TOTAL GA ANNUAL OPERATIONS	3200.0	3300.0	3400.0	3480.0
2 GA PEAK HOUR OPERATIONS	7.0	7.0	8.0	8.0
3 PERCENT GA ITINERANT OPERATIONS	50.0	50.0	50.0	50.0
4 BASED AIRCRAFT UNDER 12500 LBS	7.0	7.0	8.0	8.0
5 BASED AIRCRAFT OVER 12500 LBS	0.0	0.0	0.0	0.0

AIRCRAFT MIX AND CAPACITY FORECASTS

	1972	1977	1982	1987	1992
AIRCRAFT TYPE *A*	0	0	0	0	0
AIRCRAFT TYPE *B*	0	0	0	0	0
AIRCRAFT TYPE *C*	0	0	0	0	1
AIRCRAFT TYPE *D+E*	100	100	100	100	99
HOURLY CAPACITY VFR	77	88	99	99	99
HOURLY CAPACITY IFR	0	0	0	0	0
ANNUAL CAPACITY(000)	107	122	138	138	138

DEVELOPMENT COST SUMMARY

PLAN PERIOD	PARTICIPATION	LAND SIDE	AIR SIDE	TOTAL
BEFORE 1977	FEDERAL	$	$ 69,000	$ 69,000
	STATE/LOCAL		18,000	18,000
	TOTAL		87,000	87,000
1977	FEDERAL	5,000		5,000
	STATE/LOCAL	4,000		4,000
	TOTAL	9,000		9,000
1982	FEDERAL			
	STATE/LOCAL			
	TOTAL			
1987	FEDERAL		6,000	6,000
	STATE/LOCAL	1,000	2,000	3,000
	TOTAL	1,000	8,000	9,000
1992	FEDERAL			
	STATE/LOCAL			
	TOTAL			
TOTAL COSTS TO 1992	FEDERAL	5,000	75,000	80,000
	STATE/LOCAL	5,000	20,000	25,000
	TOTAL	10,000	95,000	105,000

DEER LODGE

MSASP AIRFIELD DEVELOPMENT COSTS IN THOUSANDS OF 1972 DOLLARS

DEER LODGE

		FED SHARE	TOTAL	FED GRANTS	STATE/LOCAL
	BEFORE 1977				
1	EXTEND RUNWAY(12/30)				
	A EARTHWORK	79.46	45.00	35.75	9.24
	B LAND ACQUISITION	79.46	0.45	0.35	0.09
	C EASEMENTS	79.46	0.50	0.39	0.10
	D SITE PREP	79.46	3.96	3.14	0.81
	E OBSTRUCTION REMOVAL	79.46	0.50	0.39	0.10
	F DRAINAGE	79.46	1.80	1.43	0.36
	G PAVING	79.46	31.70	25.18	6.51
2	LANDING AIDS				
	A EXTEND LIGHTING SYSTEM	79.46	3.32	2.63	0.68
	TOTAL ($000)		87.26	69.35	17.95
	1987				
3	NAVAIDS				
	A NDB	79.46	8.00	6.35	1.64
	TOTAL ($000)		8.00	6.36	1.64
	TOTAL PROJECT COSTS		95.27	75.71	19.60

LANDSIDE

FEDERAL SHARE OF THE PROJECT COSTS

	FED SHARE	1977	1982	1987	1992
1 GA TERMINAL BUILDING AREA(SF)	0.00	0.	0.	0.	0.
2 GA AIRCRAFT LOADING POSITIONS(NUMBER)	0.00	0.	0.	0.	0.
3 GA AC LOADING & BYPASS APRON AREA(SY)	79.46	1621.	0.	0.	0.
4 ITINERANT AIRCRAFT PARKING AREA(SY)	79.46	0.	0.	0.	0.
5 GA BASED AIRCRAFT TIE-DOWN AREA(SY)	79.46	2922.	0.	417.	0.
6 GA CONV HANGAR BLDG AND APRON AREA(SY)	79.46	0.	0.	0.	0.
7 GA *T* HANGAR BLDG & APRON AREA(SY)	79.46	0.	0.	0.	0.
8 GA PUBLIC VEHICULAR PARKING SPACE(NO.)	0.00	0.	0.	0.	0.
9 GA PUBLIC VEHICULAR PARKIMG AREA(SY)	0.00	0.	0.	0.	0.
10 AIRPORT MAINTENANCE APRON AREA(SY)	79.46	458.	14.	14.	7.
11 AIRPORT MAINTENANCE BUILDING(SF)	0.00	0.	0.	0.	0.
TOTAL IN THOUSANDS OF DOLLARS		5.0	0.0	0.4	0.0

PROJECT COST LESS FEDERAL GRANTS

	FED SHARE	1977	1982	1987	1992
1 GA TERMINAL BUILDING AREA(SF)	0.00	0.	0.	0.	0.
2 GA AIRCRAFT LOADING POSITIONS(NUMBER)	0.00	0.	0.	0.	0.
3 GA AC LOADING & BYPASS APRON AREA(SY)	79.46	419.	0.	0.	0.
4 ITINERANT AIRCRAFT PARKING AREA(SY)	79.46	0.	0.	0.	0.
5 GA BASED AIRCRAFT TIE-DOWN AREA(SY)	79.46	755.	0.	107.	0.
6 GA CONV HANGAR BLDG AND APRON AREA(SY)	79.46	0.	0.	0.	0.
7 GA *T* HANGAR BLDG & APRON AREA(SY)	79.46	0.	0.	0.	0.
8 GA PUBLIC VEHICULAR PARKING SPACE(NO.)	0.00	0.	0.	0.	0.
9 GA PUBLIC VEHICULAR PARKIMG AREA(SY)	0.00	2539.	0.	748.	0.
10 AIRPORT MAINTENANCE APRON AREA(SY)	79.46	118.	3.	3.	1.
11 AIRPORT MAINTENANCE BUILDING(SF)	0.00	160.	5.	5.	3.
TOTAL IN THOUSANDS OF DOLLARS		4.0	0.0	0.9	0.0

AIRSIDE

DELL+

The town of Dell is located in the southwestern most section of Montana. It is 40 miles south of Dillon and 23 miles north of the Idaho border on Interstate 15.

The airport is located one mile northwest of town. Existing and future air fleet will be aircraft type 'D & E'.

Facility Requirements

Only slight additons to the land side will be necessary. The air side portion will consist of paving part of the present overrun.

Name: DELL

Site Number:. 12321.1

County:. BEAVERHEAD

District:. 12

PEAK HOUR IFR AND VFR DEMAND FORECASTS

	1977	1982	1987	1992
DELL, MONTANA				
TOTAL PEAK HOUR VFR DEMAND	3.	4.	5.	6.
GA IFR PEAK HOUR DEMAND	0.	0.	0.	1.

OPERATIONAL DATA

DEMAND FORECAST INDICATORS	1977	1982	1987	1992
1 TOTAL GA ANNUAL OPERATIONS	1330.0	1670.0	2000.0	2330.0
2 GA PEAK HOUR OPERATIONS	3.0	4.0	5.0	6.0
3 PERCENT GA ITINERANT OPERATIONS	30.0	30.0	30.0	30.0
4 BASED AIRCRAFT UNDER 12500 LBS	3.0	4.0	5.0	6.0
5 BASED AIRCRAFT OVER 12500 LBS	0.0	0.0	0.0	0.0

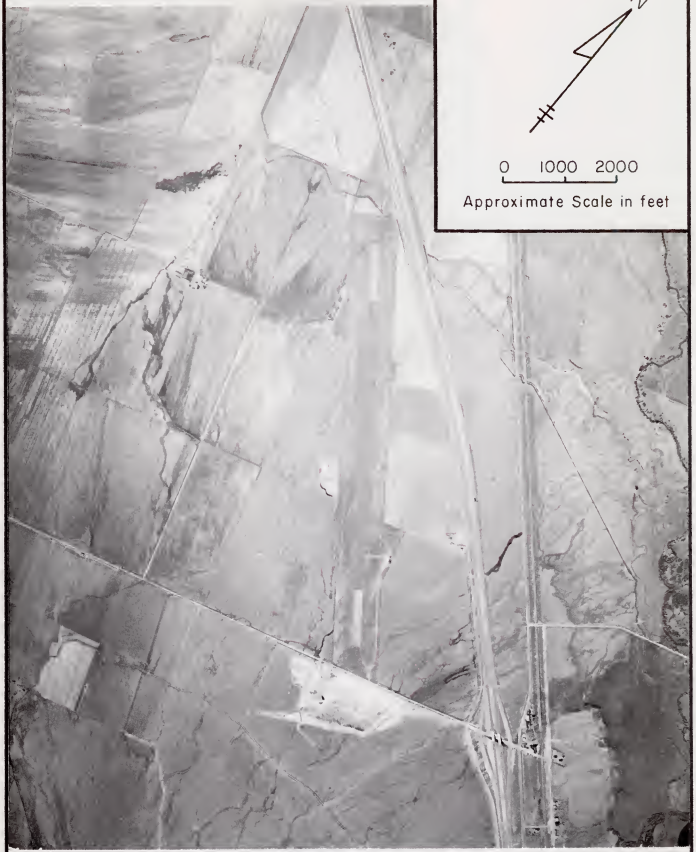
AIRCRAFT MIX AND CAPACITY FORECASTS

	1972	1977	1982	1987	1992
AIRCRAFT TYPE *A*	0	0	0	0	0
AIRCRAFT TYPE *B*	0	0	0	0	0
AIRCRAFT TYPE *C*	0	0	0	0	0
AIRCRAFT TYPE *D+E*	100	100	100	100	100
HOURLY CAPACITY VFR	77	88	99	99	99
HOURLY CAPACITY IFR	0	0	0	0	0
ANNUAL CAPACITY(000)	107	122	138	138	138

DEVELOPMENT COST SUMMARY

PLAN PERIOD	PARTICIPATION	LAND SIDE	AIR SIDE	TOTAL
BEFORE 1977	FEDERAL	$	$	$
	STATE/LOCAL		21,000	21,000
	TOTAL		21,000	21,000
1977	FEDERAL			
	STATE/LOCAL	5,000		5,000
	TOTAL	5,000		5,000
1982	FEDERAL			
	STATE/LOCAL	3,000		3,000
	TOTAL	3,000		3,000
1987	FEDERAL			
	STATE/LOCAL	2,000		2,000
	TOTAL	2,000		2,000
1992	FEDERAL			
	STATE/LOCAL	2,000		2,000
	TOTAL	2,000		2,000
TOTAL COSTS TO 1992	FEDERAL			
	STATE/LOCAL	12,000	21,000	33,000
	TOTAL	12,000	21,000	33,000

DELL



MBASP AIRFIELD DEVELOPMENT COSTS IN THOUSANDS OF 1972 DOLLARS

DELL

	FED SHARE	TOTAL	FED GRANTS	STATE/LOCAL
BEFORE 1977				
1 EXTEND RUNWAY(14/32)				
A PAVING	0.00	13.40	0.00	13.40
2 NDB	0.00	8.00	0.00	8.00
TOTAL ($000)		21.40	0.01	21.40
TOTAL PROJECT COSTS		21.40	0.01	21.40

SIDE AIR

FEDERAL SHARE OF THE PROJECT COSTS

	FED SHARE	1977	1982	1987	1992
1 GA TERMINAL BUILDING AREA(SF)	0.00	0.	0.	0.	0.
2 GA AIRCRAFT LOADING POSITIONS(NUMBER)	0.00	0.	0.	0.	0.
3 GA AC LOADING & BYPASS APRON AREA(SY)	0.00	0.	0.	0.	0.
4 ITINERANT AIRCRAFT PARKING AREA(SY)	0.00	0.	0.	0.	0.
5 GA BASED AIRCRAFT TIE-DOWN AREA(SY)	0.00	0.	0.	0.	0.
6 GA CONV HANGAR BLDG AND APRON AREA(SY)	0.00	0.	0.	0.	0.
7 GA #T# HANGAR BLDG & APRON AREA(SY)	0.00	0.	0.	0.	0.
8 GA PUBLIC VEHICULAR PARKING SPACE(NO_x)	0.00	0.	0.	0.	0.
9 GA PUBLIC VEHICULAR PARKING AREA(SY)	0.00	0.	0.	0.	0.
10 AIRPORT MAINTENANCE APRON AREA(SY)	0.00	0.	0.	0.	0.
11 AIRPORT MAINTENANCE BUILDING(SF)	0.00	0.	0.	0.	0.
TOTAL IN THOUSANDS OF DOLLARS		0.0	0.0	0.0	0.0

SIDE LAND

PROJECT COST LESS FEDERAL GRANTS

	FED SHARE	1977	1982	1987	1992
1 GA TERMINAL BUILDING AREA(SF)	0.00	0.	0.	0.	0.
2 GA AIRCRAFT LOADING POSITIONS(NUMBER)	0.00	0.	0.	0.	0.
3 GA AC LOADING & BYPASS APRON AREA(SY)	0.00	0.	1020.	0.	0.
4 ITINERANT AIRCRAFT PARKING AREA(SY)	0.00	0.	0.	0.	0.
5 GA BASED AIRCRAFT TIE-DOWN AREA(SY)	0.00	798.	525.	525.	525.
6 GA CONV HANGAR BLDG AND APRON AREA(SY)	0.00	0.	0.	0.	0.
7 GA #T# HANGAR BLDG & APRON AREA(SY)	0.00	1823.	608.	608.	608.
8 GA PUBLIC VEHICULAR PARKING SPACE(NO_x)	0.00	0.	0.	0.	0.
9 GA PUBLIC VEHICULAR PARKING AREA(SY)	0.00	2245.	748.	748.	748.
10 AIRPORT MAINTENANCE APRON AREA(SY)	0.00	239.	61.	59.	59.
11 AIRPORT MAINTENANCE BUILDING(SF)	0.00	67.	17.	17.	17.
TOTAL IN THOUSANDS OF DOLLARS		5.2	3.0	2.0	2.0

DENTON

The town of Denton is in central Montana, 40 miles northwest of Lewistown on county route 235.

The Denton Municipal airport is located two miles south of town. Only 'D & E' aircraft type is forecasted for the period.

Facility Requirements

The runway will need to be extended before 1977.

Name: DENTON

Site Number: 12323

County: FERGUS

District: 4

PEAK HOUR IFR AND VFR DEMAND FORECASTS

	1977	1982	1987	1992
DENTON, MONTANA				
TOTAL PEAK HOUR VFR DEMAND	1.	1.	2.	2.
GA IFR PEAK HOUR DEMAND	0.	0.	0.	0.

OPERATIONAL DATA

DEMAND FORECAST INDICATORS	1977	1982	1987	1992
1 TOTAL GA ANNUAL OPERATIONS	400.0	500.0	600.0	700.0
2 GA PEAK HOUR OPERATIONS	1.0	1.0	2.0	2.0
3 PERCENT GA ITINERANT OPERATIONS	15.0	16.0	17.0	18.0
4 BASED AIRCRAFT UNDER 12500 LBS	1.0	1.0	1.0	1.0
5 BASED AIRCRAFT OVER 12500 LBS	0.0	0.0	0.0	0.0

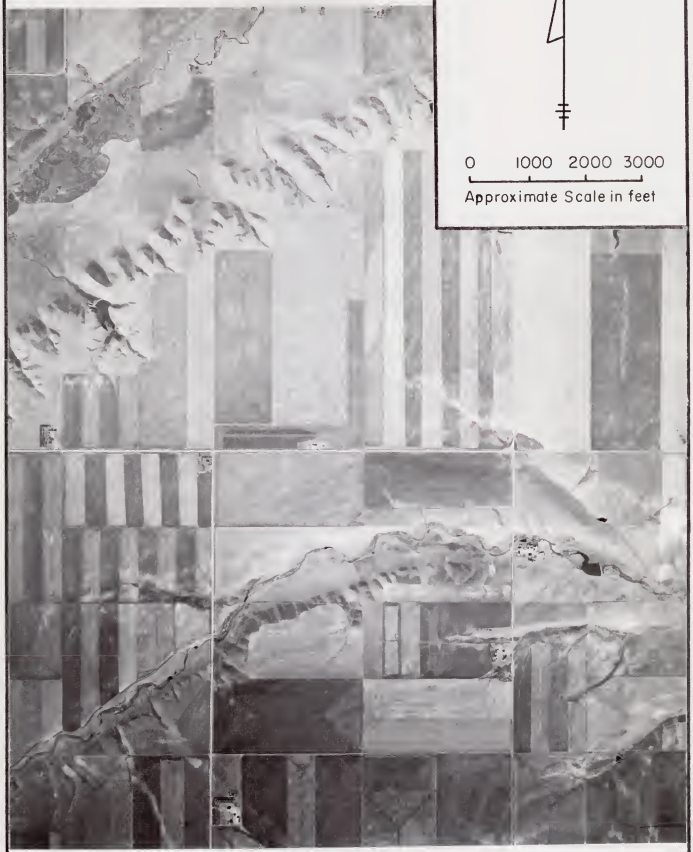
AIRCRAFT MIX AND CAPACITY FORECASTS

	1972	1977	1982	1987	1992
AIRCRAFT TYPE *A*	0	0	0	0	0
AIRCRAFT TYPE *B*	0	0	0	0	0
AIRCRAFT TYPE *C*	0	0	0	0	0
AIRCRAFT TYPE *D+E*	100	100	100	100	100
HOURLY CAPACITY VFR	77	88	99	99	99
HOURLY CAPACITY IFR	0	0	0	0	0
ANNUAL CAPACITY(000)	107	122	138	138	138

DEVELOPMENT COST SUMMARY

PLAN PERIOD	PARTICIPATION	LAND SIDE	AIR SIDE	TOTAL
BEFORE 1977	FEDERAL			
	STATE/LOCAL	$	$ 13,000	$ 13,000
	TOTAL		13,000	13,000
1977	FEDERAL			
	STATE/LOCAL	1,000		1,000
	TOTAL	1,000		1,000
1982	FEDERAL			
	STATE/LOCAL			
	TOTAL			
1987	FEDERAL			
	STATE/LOCAL	1,000		1,000
	TOTAL	1,000		1,000
1992	FEDERAL			
	STATE/LOCAL			
	TOTAL			
TOTAL COSTS TO 1992	FEDERAL			
	STATE/LOCAL	2,000	13,000	15,000
	TOTAL	2,000	13,000	15,000

DENTON



MSASP AIRFIELD DEVELOPMENT COSTS IN THOUSANDS OF 1972 DOLLARS

DENTON

	FED SHARE	TOTAL	FED GRANTS	STATE/LOCAL
BEFORE 1977				
1 EXTEND RUNWAY(16/34)				
A EARTHWORK	0.00	3.75	0.00	3.75
B LAND ACQUISITION	0.00	4.50	0.00	4.50
C EASEMENTS	0.00	0.80	0.00	0.80
D SITE PREP	0.00	3.72	0.00	3.72
E OBSTRUCTION REMOVAL	0.00	0.50	0.00	0.50
TOTAL ($000)		13.29	0.02	13.29
TOTAL PROJECT COSTS		13.29	0.02	13.29

FEDERAL SHARE OF THE PROJECT COSTS

	FED SHARE	1977	1982	1987	1992
1 GA TERMINAL BUILDING AREA(SF)	0.00	0.	0.	0.	0.
2 GA AIRCRAFT LOADING POSITIONS(NUMBER)	0.00	0.	0.	0.	0.
3 GA AC LOADING & BYPASS APRON AREA(SY)	0.00	0.	0.	0.	0.
4 ITINERANT AIRCRAFT PARKING AREA(SY)	0.00	0.	0.	0.	0.
5 GA BASED AIRCRAFT TIE-DOWN AREA(SY)	0.00	0.	0.	0.	0.
6 GA CONV HANGAR BLDG AND APRON AREA(SY)	0.00	0.	0.	0.	0.
7 GA *T* HANGAR BLDG & APRON AREA(SY)	0.00	0.	0.	0.	0.
8 GA PUBLIC VEHICULAR PARKING SPACE(NO.)	0.00	0.	0.	0.	0.
9 GA PUBLIC VEHICULAR PARKING AREA(SY)	0.00	0.	0.	0.	0.
10 AIRPORT MAINTENANCE APRON AREA(SY)	0.00	0.	0.	0.	0.
11 AIRPORT MAINTENANCE BUILDING(SF)	0.00	0.	0.	0.	0.
TOTAL IN THOUSANDS OF DOLLARS		0.0	0.0	0.0	0.0

PROJECT COST LESS FEDERAL GRANTS

	FED SHARE	1977	1982	1987	1992
1 GA TERMINAL BUILDING AREA(SF)	0.00	0.	0.	0.	0.
2 GA AIRCRAFT LOADING POSITIONS(NUMBER)	0.00	0.	0.	0.	0.
3 GA AC LOADING & BYPASS APRON AREA(SY)	0.00	0.	0.	0.	0.
4 ITINERANT AIRCRAFT PARKING AREA(SY)	0.00	0.	0.	0.	0.
5 GA BASED AIRCRAFT TIE-DOWN AREA(SY)	0.00	528.	0.	0.	0.
6 GA CONV HANGAR BLDG AND APRON AREA(SY)	0.00	0.	0.	0.	0.
7 GA *T* HANGAR BLDG & APRON AREA(SY)	0.00	0.	0.	0.	0.
8 GA PUBLIC VEHICULAR PARKING SPACE(NO.)	0.00	0.	0.	0.	0.
9 GA PUBLIC VEHICULAR PARKING AREA(SY)	0.00	748.	0.	748.	0.
10 AIRPORT MAINTENANCE APRON AREA(SY)	0.00	72.	18.	18.	18.
11 AIRPORT MAINTENANCE BUILDING(SF)	0.00	20.	5.	5.	5.
TOTAL IN THOUSANDS OF DOLLARS		1.4	0.0	0.8	0.0

DILLON

Dillon is situated in southwest Montana 65 miles south of Butte on U. S. Route 91. Interstate Route 15 should be completed through Dillon by 1990.

The airport is located five miles northeast of Dillon off State Route 41. Existing aircraft is of type 'D & E' with 'C' type aircraft being introduced in 1977 and growing in number during each increment of the forecast period.

Facility Requirements

The 1977 benchmark period will require considerable land side expansion in based aircraft tie-down area, conventional hanger building and apron area, and public vehicular parking area. Air side addition will include: extension before 1977 and in 1987, and overlay in 1982 for runway 16-34 and paving for runway (3-21) before 1977.

NAVAIDS: The present VOR appraoch procedure requires a ceiling of 1300 feet at two miles, due to local obstructions, as well as the fact that the present VOR site does not permit a straight-in approach to runway 16 or 34. In view of the relatively small IFR peak hour demand to the end of the forecast period, no further appraoch aids are recommended at this time.

Name: DILLON

Site Number: 12324

County: BEAVERHEAD

District: 12

PEAK HOUR IFR AND VFR DEMAND FORECASTS

	1977	1982	1987	1992
DILLON, MONTANA				
TOTAL PEAK HOUR VFR DEMAND	18.	21.	23.	26.
GA IFR PEAK HOUR DEMAND	1.	1.	2.	3.

OPERATIONAL DATA

DEMAND FORECAST INDICATORS

	1977	1982	1987	1992
1 TOTAL GA ANNUAL OPERATIONS	8200.0	9800.0	11400.0	13400.0
2 GA PEAK HOUR OPERATIONS	18.0	21.0	23.0	26.0
3 PERCENT GA ITINERANT OPERATIONS	50.0	50.0	50.0	50.0
4 BASED AIRCRAFT UNDER 12500 LBS	27.0	30.0	34.0	37.0
5 BASED AIRCRAFT OVER 12500 LBS	1.0	1.0	1.0	1.0

AIRCRAFT MIX AND CAPACITY FORECASTS

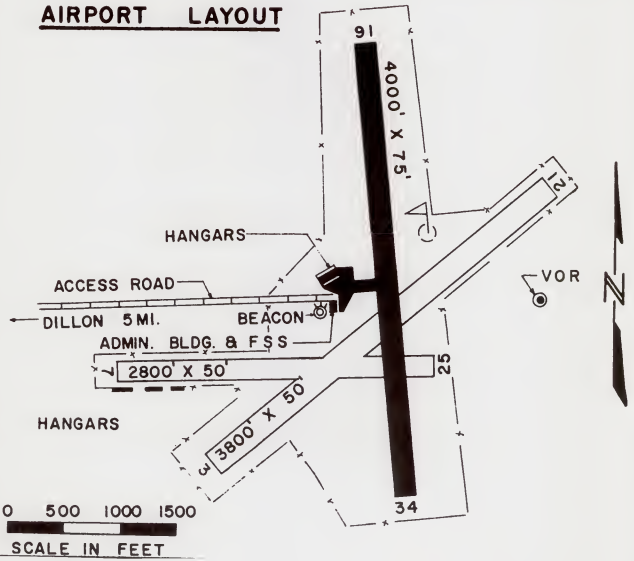
	1972	1977	1982	1987	1992
AIRCRAFT TYPE *A*	0	0	0	0	0
AIRCRAFT TYPE *B*	0	0	0	0	0
AIRCRAFT TYPE *C*	0	2	6	10	14
AIRCRAFT TYPE *D+E*	100	98	94	90	86
HOURLY CAPACITY VFR	77	88	99	99	99
HOURLY CAPACITY IFR	53	52	52	52	52
ANNUAL CAPACITY(000)	107	122	138	138	144

DEVELOPMENT COST SUMMARY

PLAN PERIOD	PARTICIPATION	LAND SIDE	AIR SIDE	TOTAL
BEFORE 1977	FEDERAL	$	$ 176,000	$ 176,000
	STATE/LOCAL		45,000	45,000
	TOTAL		221,000	221,000
1977	FEDERAL	18,000		18,000
	STATE/LOCAL	25,000		25,000
	TOTAL	43,000		43,000
1982	FEDERAL	2,000	76,000	78,000
	STATE/LOCAL	3,000	20,000	23,000
	TOTAL	5,000	96,000	101,000
1987	FEDERAL	4,000	145,000	149,000
	STATE/LOCAL	3,000	37,000	40,000
	TOTAL	7,000	182,000	189,000
1992	FEDERAL	2,000		2,000
	STATE/LOCAL	4,000		4,000
	TOTAL	6,000		6,000
TOTAL COSTS TO 1992	FEDERAL	26,000	397,000	423,000
	STATE/LOCAL	35,000	102,000	137,000
	TOTAL	61,000	499,000	560,000

DILLON

AIRPORT LAYOUT



MSASP AIRFIELD DEVELOPMENT COSTS IN THOUSANDS OF 1972 DOLLARS

DILLON

		FED SHARE	TOTAL	FED GRANTS	STATE/LOCAL
	BEFORE 1977				
1	PAVE RUNWAY(3/21)	79.46	168.00	133.49	34.50
2	EXTEND RUNWAY(16/34)				
	A EARTHWORK	79.46	4.80	3.81	0.98
	B LAND ACQUISITION	79.46	2.40	1.90	0.49
	C EASEMENT	79.46	0.55	0.43	0.11
	D SITE PREP	79.46	0.60	0.47	0.12
	E OBSTRUCTION REMOVAL	79.46	0.50	0.39	0.10
	F PAVING	79.46	40.00	31.78	8.21
3	LANDING AIDS				
	A EXTEND LIGHTING SYSTEM	79.46	4.20	3.33	0.86
	TOTAL ($000)		221.08	175.68	45.44
	1982				
4	RUNWAY OVERLAY	79.46	96.00	76.28	19.71
	TOTAL ($000)		96.00	76.28	19.72
	1987				
5	EXTEND RUNWAY(16/34)				
	A EARTHWORK	79.46	13.70	10.88	2.81
	B LAND ACQUISITION	79.46	8.00	6.35	1.64
	C EASEMENTS	79.46	0.80	0.63	0.16
	D SITE PREP	79.46	13.45	10.68	2.76
	E OBSTRUCTION REMOVAL	79.46	0.50	0.39	0.10
	F PAVING	79.46	130.00	103.29	26.70
6	LANDING AIDS				
	A EXTEND LIGHTING SYSTEM	79.46	15.60	12.39	3.20
	TOTAL ($000)		182.08	144.69	37.42
	TOTAL PROJECT COSTS		499.17	396.66	102.59

BASE-LAND SIDE

FEDERAL SHARE OF THE PROJECT COSTS

	FED SHARE	1977	1982	1987	1992
1 GA TERMINAL BUILDING AREA(SF)	0.00	0.	0.	0.	0.
2 GA AIRCRAFT LOADING POSITIONS(NUMBER)	0.00	0.	0.	0.	0.
3 GA AC LOADING & BYPASS APRON AREA(SY)	79.46	0.	0.	0.	0.
4 ITINERANT AIRCRAFT PARKING AREA(SY)	79.46	0.	0.	1001.	0.
5 GA BASED AIRCRAFT TIE-DOWN AREA(SY)	79.46	9764.	1251.	1669.	1251.
6 GA CONV HANGAR BLDG AND APRON AREA(SY)	79.46	6760.	486.	648.	486.
7 GA *T* HANGAR BLDG & APRON AREA(SY)	79.46	0.	0.	0.	0.
8 GA PUBLIC VEHICULAR PARKING SPACE(NO_x)	0.00	0.	0.	0.	0.
9 GA PUBLIC VEHICULAR PARKING AREA(SY)	0.00	0.	0.	0.	0.
10 AIRPORT MAINTENANCE APRON AREA(SY)	79.46	1173.	229.	229.	286.
11 AIRPORT MAINTENANCE BUILDING(SF)	0.00	0.	0.	0.	0.
TOTAL IN THOUSANDS OF DOLLARS		17.7	2.0	3.5	2.0

PROJECT COST LESS FEDERAL GRANTS

	FED SHARE	1977	1982	1987	1992
1 GA TERMINAL BUILDING AREA(SF)	0.00	0.	0.	0.	0.
2 GA AIRCRAFT LOADING POSITIONS(NUMBER)	0.00	0.	0.	0.	0.
3 GA AC LOADING & BYPASS APRON AREA(SY)	79.46	0.	0.	0.	0.
4 ITINERANT AIRCRAFT PARKING AREA(SY)	79.46	0.	0.	258.	0.
5 GA BASED AIRCRAFT TIE-DOWN AREA(SY)	79.46	2524.	323.	431.	323.
6 GA CONV HANGAR BLDG AND APRON AREA(SY)	79.46	10255.	738.	983.	738.
7 GA *T* HANGAR BLDG & APRON AREA(SY)	79.46	0.	0.	0.	0.
8 GA PUBLIC VEHICULAR PARKING SPACE(NO_x)	0.00	0.	0.	0.	0.
9 GA PUBLIC VEHICULAR PARKING AREA(SY)	0.00	11222.	2245.	1497.	2245.
10 AIRPORT MAINTENANCE APRON AREA(SY)	79.46	303.	59.	59.	74.
11 AIRPORT MAINTENANCE BUILDING(SF)	0.00	410.	80.	80.	100.
TOTAL IN THOUSANDS OF DOLLARS		24.7	3.4	3.3	3.5

DRUMMOND

The town of Drummond is situated in West central Montana 48 miles southeast of Missoula off Interstate Route 90. State Route 10 A extends south to Philipsburg.

The airport is located four miles south of town off U. S. 10 A. Existing type aircraft are 'D & E' type with 'C' type aircraft expected in 1982.

Facility Requirements

A small amount of land side addition will be needed in 1977. Air side expansion will be an extension of the runway and an associated road relocation.

Name: DRUMMOND

Site Number: 12333

County: GRANITE

District: 12

PEAK HOUR IFR AND VFR DEMAND FORECASTS

	1977	1982	1987	1992
DRUMMOND, MONTANA				
TOTAL PEAK HOUR VFR DEMAND	6.	6.	7.	8.
GA IFR PEAK HOUR DEMAND	0.	0.	1.	1.

OPERATIONAL DATA

DEMAND FORECAST INDICATORS	1977	1982	1987	1992
1 TOTAL GA ANNUAL OPERATIONS	2600.0	2900.0	3300.0	3700.0
2 GA PEAK HOUR OPERATIONS	6.0	6.0	7.0	8.0
3 PERCENT GA ITINERANT OPERATIONS	30.0	30.0	30.0	30.0
4 BASED AIRCRAFT UNDER 12500 LBS	5.0	6.0	7.0	8.0
5 BASED AIRCRAFT OVER 12500 LBS	0.0	0.0	0.0	0.0

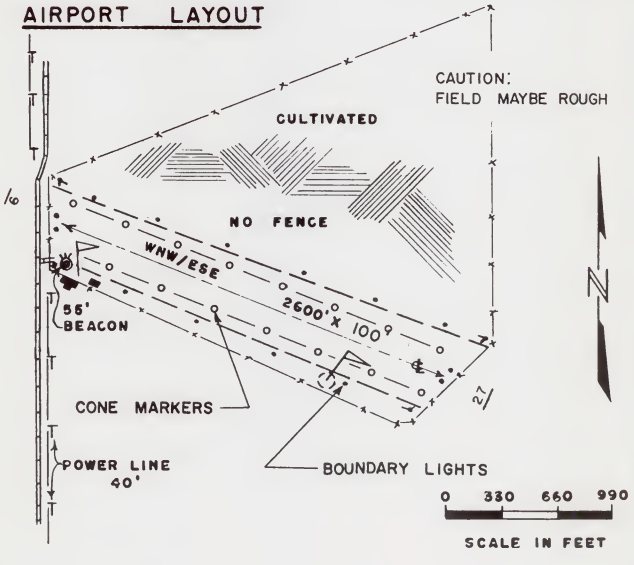
AIRCRAFT MIX AND CAPACITY FORECASTS

	1972	1977	1982	1987	1992
AIRCRAFT TYPE *A*	0	0	0	0	0
AIRCRAFT TYPE *B*	0	0	0	0	0
AIRCRAFT TYPE *C*	0	0	1	2	3
AIRCRAFT TYPE *D+E*	100	100	99	98	97
HOURLY CAPACITY VFR	77	88	99	99	99
HOURLY CAPACITY IFR	0	52	52	52	52
ANNUAL CAPACITY(000)	107	122	138	138	138

DEVELOPMENT COST SUMMARY

PLAN PERIOD	PARTICIPATION	LAND SIDE	AIR SIDE	TOTAL
BEFORE 1977	FEDERAL	$	$ 46,000	$ 46,000
	STATE/LOCAL		22,000	22,000
	TOTAL		68,000	68,000
1977	FEDERAL	4,000		4,000
	STATE/LOCAL	7,000		7,000
	TOTAL	11,000		11,000
1982	FEDERAL	1,000		1,000
	STATE/LOCAL			
	TOTAL	1,000		1,000
1987	FEDERAL	1,000		1,000
	STATE/LOCAL	1,000		1,000
	TOTAL	2,000		2,000
1992	FEDERAL	1,000		1,000
	STATE/LOCAL	1,000		1,000
	TOTAL	2,000		2,000
TOTAL COSTS TO 1992	FEDERAL	7,000	46,000	53,000
	STATE/LOCAL	9,000	22,000	31,000
	TOTAL	16,000	68,000	84,000

DRUMMOND


AIRPORT LAYOUT
CAUTION:
FIELD MAYBE ROUGH
CULTIVATED
NO FENCE
WNW/ESE
2600' X 100'
55'
BEACON
CONE MARKERS
POWER LINE
40'
BOUNDARY LIGHTS
27
0 330 660 990
SCALE IN FEET

MBASP AIRFIELD DEVELOPMENT COSTS IN THOUSANDS OF 1972 DOLLARS

DRUMMOND

	FED SHARE	TOTAL	FED GRANTS	STATE/LOCAL
BEFORE 1977				
1 EXTEND RUNWAY(9/27)		32.60	25.90	6.69
A EARTHWORK	79.46	0.60	0.47	0.12
B LAND ACQUISITION	79.46	0.80	0.63	0.16
C EASEMENTS	79.46	24.00	19.07	4.92
D SITE PREP	79.46	10.00	0.00	10.00
2 RELOCATE UNPAVED ROAD	0.00			
TOTAL ($000)		68.02	46.11	21.93
TOTAL PROJECT COSTS		68.02	46.11	21.93

LANDSIDE

FEDERAL SHARE OF THE PROJECT COSTS

	FED SHARE	1977	1982	1987	1992
1 GA TERMINAL BUILDING AREA(SF)	0.00	0.	0.	0.	0.
2 GA AIRCRAFT LOADING POSITIONS(NUMBER)	0.00	0.	0.	0.	0.
3 GA AC LOADING & BYPASS APRON AREA(SY)	79.46	810.	0.	0.	0.
4 ITINERANT AIRCRAFT PARKING AREA(SY)	79.46	0.	0.	0.	0.
5 GA BASED AIRCRAFT TIE-DOWN AREA(SY)	79.46	2088.	417.	417.	417.
6 GA CONV HANGAR BLDG AND APRON AREA(SY)	79.46	810.	162.	162.	162.
7 GA *T* HANGAR BLDG & APRON AREA(SY)	79.46	0.	0.	0.	0.
8 GA PUBLIC VEHICULAR PARKING SPACE(NO.)	0.00	0.	0.	0.	0.
9 GA PUBLIC VEHICULAR PARKIMG AREA(SY)	0.00	0.	0.	0.	0.
10 AIRPORT MAINTENANCE APRON AREA(SY)	79.46	372.	43.	57.	57.
11 AIRPORT MAINTENANCE BUILDING(SF)	0.00	0.	0.	0.	0.
TOTAL IN THOUSANDS OF DOLLARS		4.1	0.6	0.6	0.6

PROJECT COST LESS FEDERAL GRANTS

	FED SHARE	1977	1982	1987	1992
1 GA TERMINAL BUILDING AREA(SF)	0.00	0.	0.	0.	0.
2 GA AIRCRAFT LOADING POSITIONS(NUMBER)	0.00	0.	0.	0.	0.
3 GA AC LOADING & BYPASS APRON AREA(SY)	79.46	209.	0.	0.	0.
4 ITINERANT AIRCRAFT PARKING AREA(SY)	79.46	0.	0.	0.	0.
5 GA BASED AIRCRAFT TIE-DOWN AREA(SY)	79.46	539.	107.	107.	107.
6 GA CONV HANGAR BLDG AND APRON AREA(SY)	79.46	1229.	246.	246.	246.
7 GA *T* HANGAR BLDG & APRON AREA(SY)	79.46	0.	0.	0.	0.
8 GA PUBLIC VEHICULAR PARKING SPACE(NO.)	0.00	0.	0.	0.	0.
9 GA PUBLIC VEHICULAR PARKIMG AREA(SY)	0.00	4491.	0.	748.	748.
10 AIRPORT MAINTENANCE APRON AREA(SY)	79.46	96.	11.	14.	14.
11 AIRPORT MAINTENANCE BUILDING(SF)	0.00	130.	15.	20.	20.
TOTAL IN THOUSANDS OF DOLLARS		6.7	0.4	1.1	1.1

DUTTON

This town is situated in west central Montana, 32 miles north of Great Falls on U. S. Route 91. Interstate Route 15 through Dutton will be completed by 1990.

The airport is one mile east of town off U. S. 91. Only 'D & E' aircraft type have been forecasted.

Facility Requirement

A small amount of land side expansion will be needed in 1987 and 1992. A crosswind runway is required to complement runway 16-34. A detailed master plan is needed to determine the exact airport configuration. It will be necessary to purchase land (agricultural) for the development of the crosswind runway.

Name: DUTTON

Site Number:. 12337

County:. TETON

District:. 5

PEAK HOUR IFR AND VFR DEMAND FORECASTS

	1977	1982	1987	1992
DUTTON, MONTANA				
TOTAL PEAK HOUR VFR DEMAND	1.	1.	2.	2.
GA IFR PEAK HOUR DEMAND	0.	0.	0.	0.

OPERATIONAL DATA

DEMAND FORECAST INDICATORS

	1977	1982	1987	1992
1 TOTAL GA ANNUAL OPERATIONS	300.0	400.0	600.0	800.0
2 GA PEAK HOUR OPERATIONS	1.0	1.0	2.0	2.0
3 PERCENT GA ITINERANT OPERATIONS	100.0	100.0	67.0	62.0
4 BASED AIRCRAFT UNDER 12500 LBS	0.0	0.0	1.0	1.0
5 BASED AIRCRAFT OVER 12500 LBS	0.0	0.0	0.0	0.0

AIRCRAFT MIX AND CAPACITY FORECASTS

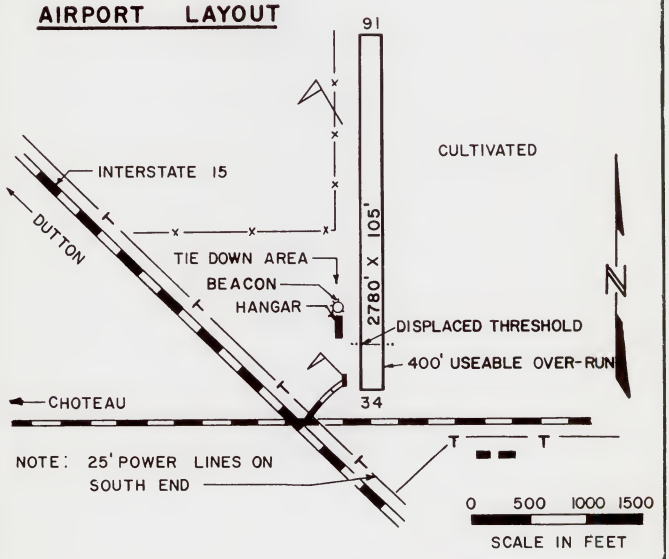
	1972	1977	1982	1987	1992
AIRCRAFT TYPE *A*	0	0	0	0	0
AIRCRAFT TYPE *B*	0	0	0	0	0
AIRCRAFT TYPE *C*	0	0	0	0	0
AIRCRAFT TYPE *D+E*	100	100	100	100	100
HOURLY CAPACITY VFR	77	88	99	99	99
HOURLY CAPACITY IFR	0	0	0	0	0
ANNUAL CAPACITY(000)	107	122	138	138	138

DEVELOPMENT COST SUMMARY

PLAN PERIOD	PARTICIPATION	LAND SIDE	AIR SIDE	TOTAL
BEFORE 1977	FEDERAL			
	STATE/LOCAL	$	$ 94,000	$ 94,000
	TOTAL		94,000	94,000
1977	FEDERAL			
	STATE/LOCAL	1,000		1,000
	TOTAL	1,000		1,000
1982	FEDERAL			
	STATE/LOCAL			
	TOTAL			
1987	FEDERAL			
	STATE/LOCAL	3,000		3,000
	TOTAL	3,000		3,000
1992	FEDERAL			
	STATE/LOCAL			
	TOTAL			
TOTAL COSTS TO 1992	FEDERAL			
	STATE/LOCAL	4,000	94,000	98,000
	TOTAL	4,000	94,000	98,000

DUTTON

AIRPORT LAYOUT



MSASP AIRFIELD DEVELOPMENT COSTS IN THOUSANDS OF 1972 DOLLARS

DUTTON

	FED SHARE	TOTAL	FED GRANTS	STATE/LOCAL
BEFORE 1977				
1 EXTEND RUNWAY(16/34)				
A EARTHWORK	0.00	38.05	0.00	38.05
B LAND ACQUISITION	0.00	1.50	0.00	1.50
C EASEMENTS	0.00	0.80	0.00	0.80
D SITE PREPARATION	0.00	3.60	0.00	3.60
E DRAINAGE	0.00	1.28	0.00	1.28
2 ROAD RELOCATION	0.00	17.50	0.00	17.50
3 LANDING AIDS				
A EXTEND LIGHTING SYSTEM	0.00	7.00	0.00	7.00
4 LAND ACQUISITION	0.00	12.00	0.00	12.00
5 CROSSWIND RUNWAY	0.00	12.00	0.00	12.00
TOTAL ($000)		93.77	0.04	93.77
TOTAL PROJECT COSTS		93.77	0.04	93.77

DESIGN

FEDERAL SHARE OF THE PROJECT COSTS

	FED SHARE	1977	1982	1987	1992
1 GA TERMINAL BUILDING AREA(SF)	0.00	0.	0.	0.	0.
2 GA AIRCRAFT LOADING POSITIONS(NUMBER)	0.00	0.	0.	0.	0.
3 GA AC LOADING & BYPASS APRON AREA(SY)	0.00	0.	0.	0.	0.
4 ITINERANT AIRCRAFT PARKING AREA(SY)	0.00	0.	0.	0.	0.
5 GA BASED AIRCRAFT TIE-DOWN AREA(SY)	0.00	0.	0.	0.	0.
6 GA CONV HANGAR BLDG AND APRON AREA(SY)	0.00	0.	0.	0.	0.
7 GA #T# HANGAR BLDG & APRON AREA(SY)	0.00	0.	0.	0.	0.
8 GA PUBLIC VEHICULAR PARKING SPACE(NO.)	0.00	0.	0.	0.	0.
9 GA PUBLIC VEHICULAR PARKIMG AREA(SY)	0.00	0.	0.	0.	0.
10 AIRPORT MAINTENANCE APRON AREA(SY)	0.00	0.	0.	0.	0.
11 AIRPORT MAINTENANCE BUILDING(SF)	0.00	0.	0.	0.	0.
TOTAL IN THOUSANDS OF DOLLARS		0.0	0.0	0.0	0.0

PROJECT COST LESS FEDERAL GRANTS

	FED SHARE	1977	1982	1987	1992
1 GA TERMINAL BUILDING AREA(SF)	0.00	0.	0.	0.	0.
2 GA AIRCRAFT LOADING POSITIONS(NUMBER)	0.00	0.	0.	0.	0.
3 GA AC LOADING & BYPASS APRON AREA(SY)	0.00	0.	0.	102.	0.
4 ITINERANT AIRCRAFT PARKING AREA(SY)	0.00	0.	0.	0.	0.
5 GA BASED AIRCRAFT TIE-DOWN AREA(SY)	0.00	3.	0.	52.	0.
6 GA CONV HANGAR BLDG AND APRON AREA(SY)	0.00	0.	0.	0.	0.
7 GA #T# HANGAR BLDG & APRON AREA(SY)	0.00	0.	0.	60.	0.
8 GA PUBLIC VEHICULAR PARKING SPACE(NO.)	0.00	0.	0.	0.	0.
9 GA PUBLIC VEHICULAR PARKIMG AREA(SY)	0.00	74.	0.	74.	0.
10 AIRPORT MAINTENANCE APRON AREA(SY)	0.00	54.	18.	36.	36.
11 AIRPORT MAINTENANCE BUILDING(SF)	0.00	15.	9.	10.	10.
TOTAL IN THOUSANDS OF DOLLARS		0.8	0.0	3.0	0.1

LANDSIDE

EAST POPLAR

The East Poplar airport is a border crossing landing strip located on the northwest side of Montana 14 miles from Scobey on State Route 13.

Facility Requirements

Small additions will need to be made on both land side and air side.

Name: EAST POPLAR

Site Number: 12495.1

County: DANIELS

District: 1

PEAK HOUR IFR AND VFR DEMAND FORECASTS

	1977	1982	1987	1992
EAST POPLAR, MONTANA				
TOTAL PEAK HOUR VFR DEMAND	2.	2.	3.	4.
GA IFR PEAK HOUR DEMAND	0.	0.	0.	0.

OPERATIONAL DATA

DEMAND FORECAST INDICATORS	1977	1982	1987	1992
1 TOTAL GA ANNUAL OPERATIONS	800.0	1000.0	1200.0	1600.0
2 GA PEAK HOUR OPERATIONS	2.0	2.0	3.0	4.0
3 PERCENT GA ITINERANT OPERATIONS	100.0	100.0	90.0	80.0
4 BASED AIRCRAFT UNDER 12500 LBS	0.0	0.0	1.0	1.0
5 BASED AIRCRAFT OVER 12500 LBS	0.0	0.0	0.0	0.0

AIRCRAFT MIX AND CAPACITY FORECASTS

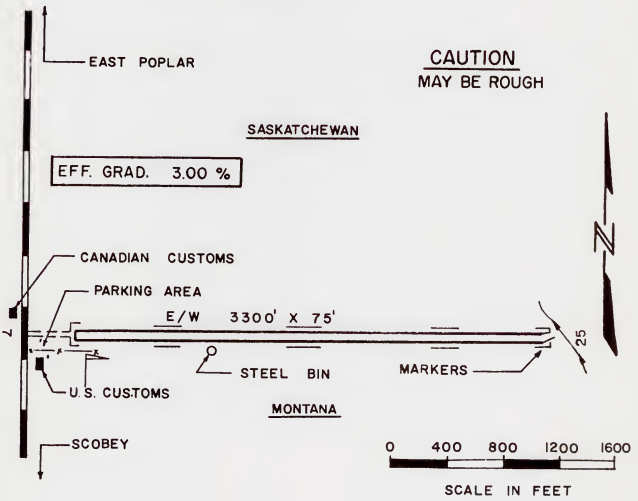
	1972	1977	1982	1987	1992
AIRCRAFT TYPE *A*	0	0	0	0	0
AIRCRAFT TYPE *B*	0	0	0	0	0
AIRCRAFT TYPE *C*	0	0	0	0	0
AIRCRAFT TYPE *D+E*	100	100	100	100	100
HOURLY CAPACITY VFR	77	88	99	99	99
HOURLY CAPACITY IFR	0	0	0	0	0
ANNUAL CAPACITY(000)	107	122	138	138	138

DEVELOPMENT COST SUMMARY

PLAN PERIOD	PARTICIPATION	LAND SIDE	AIR SIDE	TOTAL
BEFORE 1977	FEDERAL	$	$	$
	STATE/LOCAL		5,000	5,000
	TOTAL		5,000	5,000
1977	FEDERAL			
	STATE/LOCAL	4,000		4,000
	TOTAL	4,000		4,000
1982	FEDERAL			
	STATE/LOCAL			
	TOTAL			
1987	FEDERAL			
	STATE/LOCAL	2,000		2,000
	TOTAL	2,000		2,000
1992	FEDERAL			
	STATE/LOCAL	3,000		3,000
	TOTAL	3,000		3,000
TOTAL COSTS TO 1992	FEDERAL			
	STATE/LOCAL	9,000	5,000	14,000
	TOTAL	9,000	5,000	14,000

EAST POPLAR

AIRPORT LAYOUT



MSASP AIRFIELD DEVELOPMENT COSTS IN THOUSANDS OF 1972 DOLLARS

EAST POPLAR

	FED SHARE	TOTAL	FED GRANTS	STATE/LOCAL
BEFORE 1977				
1 EXTEND LANDING STRIP				
A EARTHWORK	0.00	2.10	0.00	2.10
B SITE PREP	0.00	1.92	0.00	1.92
C DRAINAGE	0.00	0.80	0.00	0.80
TOTAL ($000)		4.83	0.01	4.83
TOTAL PROJECT COSTS		4.83	0.01	4.83

FEDERAL SHARE OF THE PROJECT COSTS

	FED SHARE	1977	1982	1987	1992
1 GA TERMINAL BUILDING AREA(SF)	0.00	0.	0.	0.	0.
2 GA AIRCRAFT LOADING POSITIONS(NUMBER)	0.00	0.	0.	0.	0.
3 GA AC LOADING & BYPASS APRON AREA(SY)	0.00	0.	0.	0.	0.
4 ITINERANT AIRCRAFT PARKING AREA(SY)	0.00	0.	0.	0.	0.
5 GA BASED AIRCRAFT TIE-DOWN AREA(SY)	0.00	0.	0.	0.	0.
6 GA CONV HANGAR BLDG AND APRON AREA(SY)	0.00	0.	0.	0.	0.
7 GA *T* HANGAR BLDG & APRON AREA(SY)	0.00	0.	0.	0.	0.
8 GA PUBLIC VEHICULAR PARKING SPACE(NO.)	0.00	0.	0.	0.	0.
9 GA PUBLIC VEHICULAR PARKING AREA(SY)	0.00	0.	0.	0.	0.
10 AIRPORT MAINTENANCE APRON AREA(SY)	0.00	0.	0.	0.	0.
11 AIRPORT MAINTENANCE BUILDING(SF)	0.00	0.	0.	0.	0.
TOTAL IN THOUSANDS OF DOLLARS		0.0	0.0	0.0	0.0

PROJECT COST LESS FEDERAL GRANTS

	FED SHARE	1977	1982	1987	1992
1 GA TERMINAL BUILDING AREA(SF)	0.00	0.	0.	0.	0.
2 GA AIRCRAFT LOADING POSITIONS(NUMBER)	0.00	0.	0.	0.	0.
3 GA AC LOADING & BYPASS APRON AREA(SY)	0.00	1020.	0.	0.	1020.
4 ITINERANT AIRCRAFT PARKING AREA(SY)	0.00	1930.	0.	0.	1930.
5 GA BASED AIRCRAFT TIE-DOWN AREA(SY)	0.00	3.	0.	525.	0.
6 GA CONV HANGAR BLDG AND APRON AREA(SY)	0.00	0.	0.	408.	0.
7 GA *T* HANGAR BLDG & APRON AREA(SY)	0.00	0.	0.	408.	0.
8 GA PUBLIC VEHICULAR PARKING SPACE(NO.)	0.00	0.	0.	0.	0.
9 GA PUBLIC VEHICULAR PARKING AREA(SY)	0.00	1497.	0.	748.	748.
10 AIRPORT MAINTENANCE APRON AREA(SY)	0.00	144.	36.	36.	72.
11 AIRPORT MAINTENANCE BUILDING(SF)	0.00	40.	10.	10.	20.
TOTAL IN THOUSANDS OF DOLLARS		4.2	0.1	2.3	3.4

EKALAKA

The town of Ekalaka is situated in southeastern Montana, west and north of Custer National Forest, and 35 miles south of Baker on State Route 7.

The airport is located just east of town. Only 'D & E' aircraft type are predicted.

Facility Requirements

Small land side additions will be needed in 1977. Air side expansion calls for a runway extension and obstruction removal before 1977.

NAVAIDS: An NDB may be needed by 1992 to accommodate the IFR demand.

Name: EKALAKA

Site Number:. 12340

County:. CARTER

District:. 3

PEAK HOUR IFR AND VFR DEMAND FORECASTS

	1977	1982	1987	1992
EKALAKA,MONTANA				
TOTAL PEAK HOUR VFR DEMAND	3.	4.	5.	6.
GA IFR PEAK HOUR DEMAND	0.	0.	0.	1.

OPERATIONAL DATA

DEMAND FORECAST INDICATORS

	1977	1982	1987	1992
1 TOTAL GA ANNUAL OPERATIONS	1330.0	1670.0	2000.0	2670.0
2 GA PEAK HOUR OPERATIONS	3.0	4.0	5.0	6.0
3 PERCENT GA ITINERANT OPERATIONS	30.0	30.0	30.0	30.0
4 BASED AIRCRAFT UNDER 12500 LBS	3.0	3.0	4.0	4.0
5 BASED AIRCRAFT OVER 12500 LBS	0.0	0.0	0.0	0.0

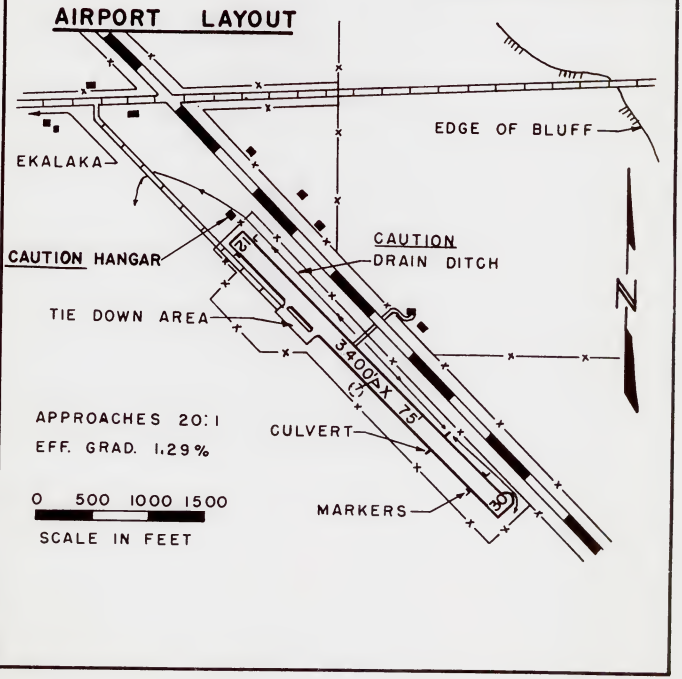
AIRCRAFT MIX AND CAPACITY FORECASTS

	1972	1977	1982	1987	1992
AIRCRAFT TYPE *A*	0	0	0	0	0
AIRCRAFT TYPE *B*	0	0	0	0	0
AIRCRAFT TYPE *C*	0	0	0	0	0
AIRCRAFT TYPE *D+F*	100	100	100	100	100
HOURLY CAPACITY VFR	85	92	99	99	99
HOURLY CAPACITY IFR	0	0	0	0	0
ANNUAL CAPACITY(000)	118	128	138	138	138

DEVELOPMENT COST SUMMARY

PLAN PERIOD	PARTICIPATION	LAND SIDE	AIR SIDE	TOTAL
BEFORE 1977	FEDERAL	$	$ 10,000	$ 10,000
	STATE/LOCAL		2,000	2,000
	TOTAL		12,000	12,000
1977	FEDERAL	2,000		2,000
	STATE/LOCAL	3,000		3,000
	TOTAL	5,000		5,000
1982	FEDERAL			
	STATE/LOCAL	1,000		1,000
	TOTAL	1,000		1,000
1987	FEDERAL	1,000		1,000
	STATE/LOCAL	1,000		1,000
	TOTAL	2,000		2,000
1992	FEDERAL	2,000		2,000
	STATE/LOCAL	2,000		2,000
	TOTAL	4,000		4,000
TOTAL COSTS TO 1992	FEDERAL	5,000	10,000	15,000
	STATE/LOCAL	7,000	2,000	9,000
	TOTAL	12,000	12,000	24,000

EKALAKA


AIRPORT LAYOUT
EDGE OF BLUFF
EKALAKA
CAUTION HANGAR
CAUTION
DRAIN DITCH
TIE DOWN AREA
3400A X 75'
APPROACHES 20:1
EFF. GRAD. 1.29%
CULVERT
MARKERS
0 500 1000 1500
SCALE IN FEET
N

MSASP AIRFIELD DEVELOPMENT COSTS IN THOUSANDS OF 1972 DOLLARS

EKALAKA

AIRSIDE

		FED SHARE	TOTAL	FED GRANTS	STATE/LOCAL
	BEFORE 1977				
1	EXTEND RUNWAY(12/30)				
	A EARTHWORK	79.46	6.00	4.76	1.23
	B LAND ACQUISITION	79.46	1.30	1.03	0.26
	C EASEMENTS	79.46	0.80	0.63	0.16
	D SITE PREP.	79.46	1.20	0.95	0.24
	E OBSTRUCTION REMOVAL	79.46	0.25	0.19	0.05
	F DRAINAGE	79.46	2.40	1.90	0.49
	TOTAL (5000)		11.97	9.52	2.48
	TOTAL PROJECT COSTS		11.97	9.52	2.48

LANDSIDE

FEDERAL SHARE OF THE PROJECT COSTS

		FED SHARE	1977	1982	1987	1992
1	GA TERMINAL BUILDING AREA(SF)	0.00	0.	0.	0.	0.
2	GA AIRCRAFT LOADING POSITION$(NUMBER)	0.00	0.	0.	0.	0.
3	GA AC LOADING & BYPASS APRON AREA(SY)	79.46	810.	0.	0.	810.
4	ITINERANT AIRCRAFT PARKING AREA(SY)	79.46	0.	0.	0.	0.
5	GA BASED AIRCRAFT TIE-DOWN AREA(SY)	79.46	0.	0.	0.	384.
6	GA CONV HANGAR BLDG AND APRON AREA(SY)	79.46	324.	0.	162.	162.
7	GA *T* HANGAR BLDG & APRON AREA(SY)	79.46	644.	0.	322.	322.
8	GA PUBLIC VEHICULAR PARKING SPACE(NO.)	0.00	0.	0.	0.	0.
9	GA PUBLIC VEHICULAR PARKING AREA(SY)	0.00	0.	0.	0.	0.
10	AIRPORT MAINTENANCE APRON AREA(SY)	79.46	143.	29.	57.	71.
11	AIRPORT MAINTENANCE BUILDING(SF)	0.00	0.	0.	0.	0.
	TOTAL IN THOUSANDS OF DOLLARS		1.9	0.0	0.5	1.8

PROJECT COST LESS FEDERAL GRANTS

		FED SHARE	1977	1982	1987	1992
1	GA TERMINAL BUILDING AREA(SF)	0.00	0.	0.	0.	0.
2	GA AIRCRAFT LOADING POSITIONS(NUMBER)	0.00	0.	0.	0.	0.
3	GA AC LOADING & BYPASS APRON AREA(SY)	79.46	209.	0.	0.	209.
4	ITINERANT AIRCRAFT PARKING AREA(SY)	79.46	0.	0.	0.	0.
5	GA BASED AIRCRAFT TIE-DOWN AREA(SY)	79.46	0.	0.	0.	99.
6	GA CONV HANGAR BLDG AND APRON AREA(SY)	79.46	492.	0.	246.	246.
7	GA *T* HANGAR BLDG & APRON AREA(SY)	79.46	571.	0.	286.	286.
8	GA PUBLIC VEHICULAR PARKING SPACE(NO.)	0.00	0.	0.	0.	0.
9	GA PUBLIC VEHICULAR PARKING AREA(SY)	0.00	1497.	748.	748.	748.
10	AIRPORT MAINTENANCE APRON AREA(SY)	79.46	37.	7.	14.	18.
11	AIRPORT MAINTENANCE BUILDING(SF)	0.00	50.	10.	20.	25.
	TOTAL IN THOUSANDS OF DOLLARS		2.9	0.8	1.3	1.6

ENNIS

Ennis is located in mountainous southwest Montana on U.S. 287, 37 miles southwest of Bozeman. The Beaverhead National Forest is found to the east, northwest, and southwest of town.

Sportsman Field, a privately owned airport, is northwest of town just off U.S. 287. The demand for D, E and C aircraft operation is forecasted to the extent that it is considered wise to develop a new-public airport. A master plan should be developed to insure proper development.

Facility Requirements

A new publicly-owned BU type airport should be developed to include runway/taxiway/apron paving, auto parking, access road construction, landing aids and utilities.

NAVAIDS: An NDB will be required by 1977, to handle the forecasted IFR traffic demand through 1992.

Name: ENNIS

Site Number:. 12342

County:. MADISON

District:. 12

PEAK HOUR IFR AND VFR DEMAND FORECASTS

	1977	1982	1987	1992
ENNIS, MONTANA				
TOTAL PEAK HOUR VFR DEMAND	16.	18.	19.	21.
GA IFR PEAK HOUR DEMAND	1.	1.	2.	2.

OPERATIONAL DATA

DEMAND FORECAST INDICATORS

	1977	1982	1987	1992
1 TOTAL GA ANNUAL OPERATIONS	7330.0	8000.0	8670.0	9670.0
2 GA PEAK HOUR OPERATIONS	16.0	18.0	19.0	21.0
3 PERCENT GA ITINERANT OPERATIONS	30.0	30.0	30.0	30.0
4 BASED AIRCRAFT UNDER 12500 LBS	7.0	8.0	9.0	10.0
5 BASED AIRCRAFT OVER 12500 LBS	0.0	0.0	0.0	0.0

AIRCRAFT MIX AND CAPACITY FORECASTS

	1972	1977	1982	1987	1992
AIRCRAFT TYPE *A*	0	0	0	0	0
AIRCRAFT TYPE *B*	0	0	0	0	0
AIRCRAFT TYPE *C*	0	0	0	0	1
AIRCRAFT TYPE *D+E*	100	100	100	100	99
HOURLY CAPACITY VFR	77	88	99	99	99
HOURLY CAPACITY IFR	0	0	0	0	0
ANNUAL CAPACITY(000)	107	122	138	138	138

DEVELOPMENT COST SUMMARY

PLAN PERIOD	PARTICIPATION	LAND SIDE	AIR SIDE	TOTAL
BEFORE 1977	FEDERAL	$	$ 313,000	$ 313,000
	STATE/LOCAL		82,000	82,000
	TOTAL		395,000	395,000
1977	FEDERAL	6,000		6,000
	STATE/LOCAL	28,000		28,000
	TOTAL	34,000		34,000
1982	FEDERAL	1,000		1,000
	STATE/LOCAL	4,000		4,000
	TOTAL	5,000		5,000
1987	FEDERAL	1,000		1,000
	STATE/LOCAL	2,000		2,000
	TOTAL	3,000		3,000
1992	FEDERAL	1,000		1,000
	STATE/LOCAL	3,000		3,000
	TOTAL	4,000		4,000
TOTAL COSTS TO 1992	FEDERAL	9,000	313,000	322,000
	STATE/LOCAL	37,000	82,000	119,000
	TOTAL	46,000	395,000	441,000

ENNIS

MSASP AIRFIELD DEVELOPMENT COSTS IN THOUSANDS OF 1972 DOLLARS

ENNIS-NEW AIRPORT

AIRSIDE

	FED SHARE	TOTAL	FED GRANTS	STATE/LOCAL
BEFORE 1977				
1 MISC. AIRPORT DEVELOPMEN				
A LAND ACQUISITION	79.46	10.00	7.94	2.05
B SITE PREPARATION	79.46	13.00	11.91	1.08
C DRAINAGE	79.46	12.00	9.53	2.46
D ACCESS ROAD	79.46	3.00	2.38	0.61
E AIRCRAFT PARKING	79.46	1.60	1.27	0.32
F AUTO PARKING	0.00	1.60	0.00	1.60
G PAVE RW.TW.APRONS	79.46	300.00	238.37	61.62
2 LANDING AIDS				
A MIRL	79.46	34.00	27.01	6.98
B BEACON	79.46	5.00	3.97	1.02
3 UTILITIES	79.46	5.00	3.97	1.02
4 NDB	79.46	8.00	6.35	1.64
TOTAL ($000)		395.25	312.80	82.50
TOTAL PROJECT COSTS		395.25	312.80	82.50

LANDSIDE

FEDERAL SHARE OF THE PROJECT COSTS

	FED SHARE	1977	1982	1987	1992
1 GA TERMINAL BUILDING AREA(SF)	0.00	0.	0.	0.	0.
2 GA AIRCRAFT LOADING POSITIONS(NUMBER)	0.00	0.	0.	0.	0.
3 GA AC LOADING & BYPASS APRON AREA(SY)	79.46	1621.	810.	0.	0.
4 ITINERANT AIRCRAFT PARKING AREA(SY)	79.46	0.	0.	0.	0.
5 GA BASED AIRCRAFT TIE-DOWN AREA(SY)	79.46	2922.	417.	417.	417.
6 GA CONV HANGAR BLDG AND APRON AREA(SY)	79.46	0.	0.	0.	0.
7 GA *T* HANGAR BLDG & APRON AREA(SY)	79.46	0.	0.	0.	0.
8 GA PUBLIC VEHICULAR PARKING SPACE(NO.)	0.00	0.	0.	0.	0.
9 GA PUBLIC VEHICULAR PARKING AREA(SY)	0.00	0.	0.	0.	0.
10 AIRPORT MAINTENANCE APRON AREA(SY)	79.46	1048.	96.	96.	143.
11 AIRPORT MAINTENANCE BUILDING(SF)	0.00	0.	0.	0.	0.
TOTAL IN THOUSANDS OF DOLLARS		5.6	1.3	0.5	0.6

PROJECT COST LESS FEDERAL GRANTS

	FED SHARE	1977	1982	1987	1992
1 GA TERMINAL BUILDING AREA(SF)	0.00	13960.	1620.	810.	1620.
2 GA AIRCRAFT LOADING POSITIONS(NUMBER)	0.00	0.	0.	0.	0.
3 GA AC LOADING & BYPASS APRON AREA(SY)	79.46	419.	209.	0.	0.
4 ITINERANT AIRCRAFT PARKING AREA(SY)	79.46	0.	0.	0.	0.
5 GA BASED AIRCRAFT TIE-DOWN AREA(SY)	79.46	755.	107.	107.	107.
6 GA CONV HANGAR BLDG AND APRON AREA(SY)	79.46	0.	0.	0.	0.
7 GA *T* HANGAR BLDG & APRON AREA(SY)	79.46	0.	0.	0.	0.
8 GA PUBLIC VEHICULAR PARKING SPACE(NO.)	0.00	0.	0.	0.	0.
9 GA PUBLIC VEHICULAR PARKING AREA(SY)	0.00	11975.	1497.	748.	1497.
10 AIRPORT MAINTENANCE APRON AREA(SY)	79.46	271.	24.	24.	37.
11 AIRPORT MAINTENANCE BUILDING(SF)	0.00	367.	33.	34.	50.
TOTAL IN THOUSANDS OF DOLLARS		27.8	3.5	1.7	3.3

EUREKA

Eureka is situated in the heavily forested and mountainous region of northwest Montana. The Kootenai National Forest almost encircles the town, and Glacier National Park is 55 miles to the south The Canadian border is 9 miles to the north and Whitefish is 51 miles to the southeast on U. S. Route 93.

The airport is three miles northwest of town off State Route 37. Some small 'C' aircraft type activity is currently present and will increase throughout the forecast period. Restrictive zoning should be considered to insure community developments compatible with the airport.

Facility Requirements

The 1977 interval will require moderate land side additions in terminal building area and public vehicular parking area. Air side expansion will consist of a runway overlay in 1987.

NAVIADS: An NDB is already scheduled for installation at this airport. It should suffice for IFR operations throughout the forecast period.

Name: EUREKA

Site Number:. 12344

County:. LINCOLN

District:. 10

PEAK HOUR IFR AND VFR DEMAND FORECASTS

	1977	1982	1987	1992
EUREKA, MONTANA				
TOTAL PEAK HOUR VFR DEMAND	13.	14.	14.	15.
GA IFR PEAK HOUR DEMAND	1.	1.	1.	2.

OPERATIONAL DATA

DEMAND FORECAST INDICATORS	1977	1982	1987	1992
1 TOTAL GA ANNUAL OPERATIONS	6000.0	6296.0	6207.0	6670.0
2 GA PEAK HOUR OPERATIONS	13.0	14.0	14.0	15.0
3 PERCENT GA ITINERANT OPERATIONS	25.0	27.0	29.0	30.0
4 BASED AIRCRAFT UNDER 12500 LBS	11.0	12.0	13.0	14.0
5 BASED AIRCRAFT OVER 12500 LBS	0.0	0.0	0.0	0.0

AIRCRAFT MIX AND CAPACITY FORECASTS

	1972	1977	1982	1987	1992
AIRCRAFT TYPE *A*	0	C	0	0	0
AIRCRAFT TYPE *B*	0	0	0	0	0
AIRCRAFT TYPE *C*	1	2	3	6	13
AIRCRAFT TYPE *D+E*	99	98	97	94	87
HOURLY CAPACITY VFR	77	88	99	99	99
HOURLY CAPACITY IFR	0	0	0	0	0
ANNUAL CAPACITY(000)	107	122	138	138	142

DEVELOPMENT COST SUMMARY

PLAN PERIOD	PARTICIPATION	LAND SIDE	AIR SIDE	TOTAL
BEFORE 1977	FEDERAL	$	$ 6,000	$ 6,000
	STATE/LOCAL		2,000	2,000
	TOTAL		8,000	8,000
1977	FEDERAL	6,000		6,000
	STATE/LOCAL	28,000		28,000
	TOTAL	34,000		34,000
1982	FEDERAL	1,000		1,000
	STATE/LOCAL	2,000		2,000
	TOTAL	3,000		3,000
1987	FEDERAL	1,000	38,000	39,000
	STATE/LOCAL	1,000	10,000	11,000
	TOTAL	2,000	48,000	50,000
1992	FEDERAL	1,000		1,000
	STATE/LOCAL	2,000		2,000
	TOTAL	3,000		3,000
TOTAL COSTS TO 1992	FEDERAL	9,000	44,000	53,000
	STATE/LOCAL	33,000	12,000	45,000
	TOTAL	42,000	56,000	98,000

EUREKA

MSASP AIRFIELD DEVELOPMENT COSTS IN THOUSANDS OF 1972 DOLLARS

EUREKA

	FED SHARE	TOTAL	FED GRANTS	STATE/LOCAL
BEFORE 1977				
1 NDB	79.46	8.00	6.35	1.64
TOTAL ($000)		8.00	6.35	1.64
1987				
2 OVERLAY RUNWAY(14/32)	79.46	48.00	38.14	9.86
TOTAL ($000)		48.00	38.14	9.86
TOTAL PROJECT COSTS		56.00	44.50	11.50

LANDSIDE

FEDERAL SHARE OF THE PROJECT COSTS

	FED SHARE	1977	1982	1987	1992
1 GA TERMINAL BUILDING AREA(SF)	0.00	0.	0.	0.	0.
2 GA AIRCRAFT LOADING POSITIONS(NUMBER)	0.00	0.	0.	0.	0.
3 GA AC LOADING & BYPASS APRON AREA(SY)	79.46	0.	0.	0.	0.
4 ITINERANT AIRCRAFT PARKING AREA(SY)	79.46	0.	0.	0.	0.
5 GA BASED AIRCRAFT TIE-DOWN AREA(SY)	79.46	0.	0.	0.	0.
6 GA CONV HANGAR BLDG AND APRON AREA(SY)	79.46	1783.	162.	162.	162.
7 GA *T* HANGAR BLDG & APRON AREA(SY)	79.46	3488.	322.	322.	322.
8 GA PUBLIC VEHICULAR PARKING SPACE(NO.)	0.00	0.	0.	0.	0.
9 GA PUBLIC VEHICULAR PARKING AREA(SY)	0.00	0.	0.	0.	0.
10 AIRPORT MAINTENANCE APRON AREA(SY)	79.46	858.	42.	0.	66.
11 AIRPORT MAINTENANCE BUILDING(SF)	0.00	0.	0.	0.	0.
TOTAL IN THOUSANDS OF DOLLARS		6.1	0.5	0.5	0.6

PROJECT COST LESS FEDERAL GRANTS

	FED SHARE	1977	1982	1987	1992
1 GA TERMINAL BUILDING AREA(SF)	0.00	11530.	810.	0.	810.
2 GA AIRCRAFT LOADING POSITIONS(NUMBER)	0.00	0.	0.	0.	0.
3 GA AC LOADING & BYPASS APRON AREA(SY)	79.46	0.	0.	0.	0.
4 ITINERANT AIRCRAFT PARKING AREA(SY)	79.46	0.	0.	0.	0.
5 GA BASED AIRCRAFT TIE-DOWN AREA(SY)	79.46	0.	0.	0.	0.
6 GA CONV HANGAR BLDG AND APRON AREA(SY)	79.46	2705.	246.	246.	246.
7 GA *T* HANGAR BLDG & APRON AREA(SY)	79.46	3097.	286.	286.	286.
8 GA PUBLIC VEHICULAR PARKING SPACE(NO.)	0.00	0.	0.	0.	0.
9 GA PUBLIC VEHICULAR PARKING AREA(SY)	0.00	9730.	748.	0.	748.
10 AIRPORT MAINTENANCE APRON AREA(SY)	79.46	221.	11.	0.	17.
11 AIRPORT MAINTENANCE BUILDING(SF)	0.00	300.	15.	0.	23.
TOTAL IN THOUSANDS OF DOLLARS		27.6	2.1	0.5	2.1

FAIRFIELD

The town of Fairfield is situated in the plains region of western Montana, 40 miles east of the Rocky Mountains and 33 miles west of Great Falls on U. S. Route 89.

The airport is located one mile north of town. Access is by a dirt road from U. S. 89. The forecast period indicates only 'D & E' aircraft type.

Facility Requirements

Additions to the land side phase are small. A runway extension will be necessary before 1977.

Name: FAIRFIELD

Site Number:. 12344.5

County:. TETON

District:. 5

PEAK HOUR IFR AND VFR DEMAND FORECASTS

	1977	1982	1987	1992
FAIRFIELD, MONTANA				
TOTAL PEAK HOUR VFR DEMAND	2.	2.	3.	4.
GA IFR PEAK HOUR DEMAND	0.	0.	0.	0.

OPERATIONAL DATA

DEMAND FORECAST INDICATORS

	1977	1982	1987	1992
1 TOTAL GA ANNUAL OPERATIONS	800.0	1000.0	1200.0	1600.0
2 GA PEAK HOUR OPERATIONS	2.0	2.0	3.0	4.0
3 PERCENT GA ITINERANT OPERATIONS	87.0	80.0	75.0	65.0
4 BASED AIRCRAFT UNDER 12500 LBS	1.0	2.0	3.0	4.0
5 BASED AIRCRAFT OVER 12500 LBS	0.0	0.0	0.0	0.0

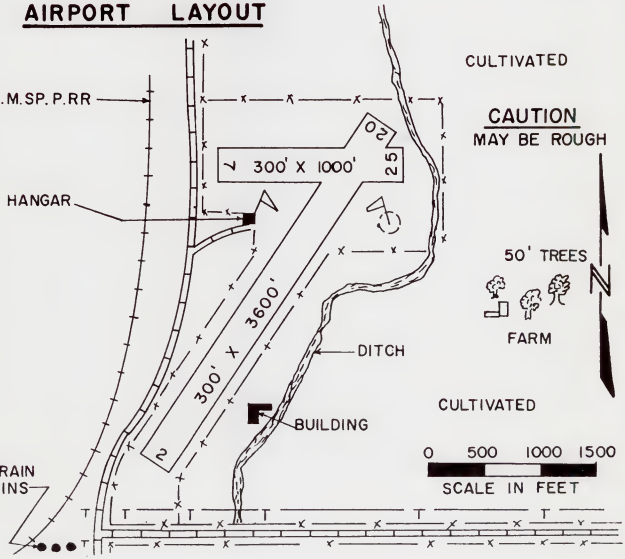
AIRCRAFT MIX AND CAPACITY FORECASTS

	1972	1977	1982	1987	1992
AIRCRAFT TYPE *A*	0	0	0	0	0
AIRCRAFT TYPE *B*	0	0	0	0	0
AIRCRAFT TYPE *C*	0	0	0	0	0
AIRCRAFT TYPE *D+E*	100	100	100	100	100
HOURLY CAPACITY VFR	85	92	99	99	99
HOURLY CAPACITY IFR	0	0	0	0	0
ANNUAL CAPACITY(000)	118	128	138	138	138

DEVELOPMENT COST SUMMARY

PLAN PERIOD	PARTICIPATION	LAND SIDE	AIR SIDE	TOTAL
BEFORE 1977	FEDERAL			
	STATE/LOCAL	$	$ 28,000	$ 28,000
	TOTAL		28,000	28,000
1977	FEDERAL			
	STATE/LOCAL	3,000		3,000
	TOTAL	3,000		3,000
1982	FEDERAL			
	STATE/LOCAL	1,000		1,000
	TOTAL	1,000		1,000
1987	FEDERAL			
	STATE/LOCAL	2,000		2,000
	TOTAL	2,000		2,000
1992	FEDERAL			
	STATE/LOCAL	2,000		2,000
	TOTAL	2,000		2,000
TOTAL COSTS TO 1992	FEDERAL			
	STATE/LOCAL	8,000	28,000	36,000
	TOTAL	8,000	28,000	36,000

FAIRFIELD


AIRPORT LAYOUT
CULTIVATED
C.M.SP.P.RR
CAUTION
MAY BE ROUGH
20
25
300' X 1000'
HANGAR
50' TREES
300' X 3600'
DITCH
FARM
CULTIVATED
BUILDING
0 500 1000 1500
SCALE IN FEET
GRAIN BINS

MSASP AIRFIELD DEVELOPMENT COSTS IN THOUSANDS OF 1972 DOLLARS

FAIRFIELD

	FED SHARE	TOTAL	FED GRANTS	STATE/LOCAL
BEFORE 1977				
1 EXTEND RUNWAY(2/20)				
A EARTHWORK	0.00	16.50	0.00	16.50
B LAND ACQUISITION	0.00	0.84	0.00	0.84
C EASEMENTS	0.00	0.28	0.00	0.28
D SITE PREP	0.00	5.40	0.00	5.40
E OBSTRUCTION REMOVAL	0.00	0.50	0.00	0.50
F DRAINAGE	0.00	4.00	0.00	4.00
TOTAL ($000)		27.54	0.02	27.54
TOTAL PROJECT COSTS		27.54	0.02	27.54

FEDERAL SHARE OF THE PROJECT COSTS

	FED SHARE	1977	1982	1987	1992
1 GA TERMINAL BUILDING AREA(SF)	0.00	0.	0.	0.	0.
2 GA AIRCRAFT LOADING POSITIONS(NUMBER)	0.00	0.	0.	0.	0.
3 GA AC LOADING & BYPASS APRON AREA(SY)	0.00	0.	0.	0.	0.
4 ITINERANT AIRCRAFT PARKING AREA(SY)	0.00	0.	0.	0.	0.
5 GA BASED AIRCRAFT TIE-DOWN AREA(SY)	0.00	0.	0.	0.	0.
6 GA CONV HANGAR BLDG AND APRON AREA(SY)	0.00	0.	0.	0.	0.
7 GA *T* HANGAR BLDG & APRON AREA(SY)	0.00	0.	0.	0.	0.
8 GA PUBLIC VEHICULAR PARKING SPACE(NO.)	0.00	0.	0.	0.	0.
9 GA PUBLIC VEHICULAR PARKING AREA(SY)	0.00	0.	0.	0.	0.
10 AIRPORT MAINTENANCE APRON AREA(SY)	0.00	0.	0.	0.	0.
11 AIRPORT MAINTENANCE BUILDING(SF)	0.00	0.	0.	0.	0.
TOTAL IN THOUSANDS OF DOLLARS		0.0	0.0	0.0	0.0

PROJECT COST LESS FEDERAL GRANTS

	FED SHARE	1977	1982	1987	1992
1 GA TERMINAL BUILDING AREA(SF)	0.00	0.	0.	0.	0.
2 GA AIRCRAFT LOADING POSITIONS(NUMBER)	0.00	0.	0.	0.	0.
3 GA AC LOADING & BYPASS APRON AREA(SY)	0.00	1020.	0.	0.	0.
4 ITINERANT AIRCRAFT PARKING AREA(SY)	0.00	0.	0.	0.	0.
5 GA BASED AIRCRAFT TIE-DOWN AREA(SY)	0.00	528.	525.	525.	525.
6 GA CONV HANGAR BLDG AND APRON AREA(SY)	0.00	0.	0.	0.	0.
7 GA *T* HANGAR BLDG & APRON AREA(SY)	0.00	608.	608.	608.	608.
8 GA PUBLIC VEHICULAR PARKING SPACE(NO.)	0.00	0.	0.	0.	0.
9 GA PUBLIC VEHICULAR PARKING AREA(SY)	0.00	1497.	0.	748.	748.
10 AIRPORT MAINTENANCE APRON AREA(SY)	0.00	144.	36.	36.	72.
11 AIRPORT MAINTENANCE BUILDING(SF)	0.00	40.	10.	10.	20.
TOTAL IN THOUSANDS OF DOLLARS		3.8	1.2	1.9	2.0

FAIRVIEW

The city of Fairview is situated on the Montana - North Dakota border just north of the Yellowstone River. It is 12 miles north of Sidney on State Route 200.

The airport is located two miles northwest of town on county route 201. Only 'D & E' aircraft type is forecasted for the period.

Facility Requirements

Minor additions will be needed on the land side phase during the forecast period. Air side expansion will include a runway extension before 1977, and a MIRL system, beacon, and power addition in 1992.

NAVAIDS: An NDB will be required by 1992 to accommodate the forecasted IFR operations.

Name: FAIRVIEW

Site Number:. 12346

County:. RICHLAND

District:. 2

PEAK HOUR IFR AND VFR DEMAND FORECASTS

	1977	1982	1987	1992
FAIRVIEW, MONTANA				
TOTAL PEAK HOUR VFR DEMAND	2.	3.	4.	5.
GA IFR PEAK HOUR DEMAND	0.	0.	0.	1.

OPERATIONAL DATA

DEMAND FORECAST INDICATORS

	1977	1982	1987	1992
1 TOTAL GA ANNUAL OPERATIONS	1000.0	1200.0	1600.0	2100.0
2 GA PEAK HOUR OPERATIONS	2.0	3.0	4.0	5.0
3 PERCENT GA ITINERANT OPERATIONS	80.0	75.0	72.0	70.0
4 BASED AIRCRAFT UNDER 12500 LBS	2.0	2.0	3.0	4.0
5 BASED AIRCRAFT OVER 12500 LBS	0.0	0.0	0.0	0.0

AIRCRAFT MIX AND CAPACITY FORECASTS

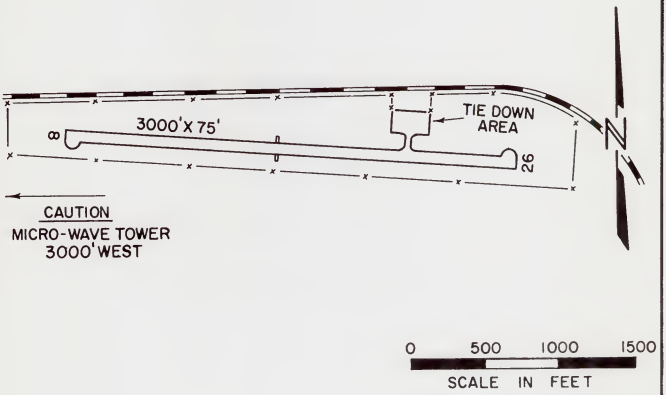
	1972	1977	1982	1987	1992
AIRCRAFT TYPE *A*	0	0	0	0	0
AIRCRAFT TYPE *B*	0	0	0	0	0
AIRCRAFT TYPE *C*	0	0	0	0	0
AIRCRAFT TYPE *C-F*	100	100	100	100	100
HOURLY CAPACITY VFR	77	88	99	99	99
HOURLY CAPACITY IFR	0	0	0	0	0
ANNUAL CAPACITY(000)	107	122	138	138	138

DEVELOPMENT COST SUMMARY

PLAN PERIOD	PARTICIPATION	LAND SIDE	AIR SIDE	TOTAL
	FEDERAL	$	$	$
BEFORE 1977	STATE/LOCAL		9,000	9,000
	TOTAL		9,000	9,000
	FEDERAL			
1977	STATE/LOCAL	5,000		5,000
	TOTAL	5,000		5,000
	FEDERAL			
1982	STATE/LOCAL	1,000		1,000
	TOTAL	1,000		1,000
	FEDERAL			
1987	STATE/LOCAL	2,000		2,000
	TOTAL	2,000		2,000
	FEDERAL	2,000	30,000	32,000
1992	STATE/LOCAL	2,000	8,000	10,000
	TOTAL	4,000	38,000	42,000
	FEDERAL	2,000	30,000	32,000
TOTAL COSTS TO 1992	STATE/LOCAL	10,000	17,000	27,000
	TOTAL	12,000	47,000	59,000

FAIRVIEW

AIRPORT LAYOUT



MSASP AIRFIELD DEVELOPMENT COSTS IN THOUSANDS OF 1972 DOLLARS

FAIRVIEW

AIRSIDE

	FED SHARE	TOTAL	FED GRANTS	STATE/LOCAL
BEFORE 1977				
1 EXTEND RUNWAY(8/26)				
A EARTHWORK	0.00	1.50	0.00	1.50
B LAND ACQUISITION	0.00	1.65	0.00	1.65
C EASEMENTS	0.00	0.80	0.00	0.80
D SITE PREP.	0.00	1.20	0.00	1.20
E OBSTRUCTION REMOVAL	0.00	2.50	0.00	2.50
F DRAINAGE	0.00	1.20	0.00	1.20
TOTAL ($000)		8.87	0.02	8.87
1992				
2 LANDING AIDS				
A MIRL	79.46	22.40	17.79	4.60
B BEACON	79.46	5.00	3.97	1.02
3 UTILITIES				
A POWER	79.46	3.00	2.38	0.61
4 NAVAIDS				
A NDB	79.46	8.00	6.35	1.64
TOTAL ($000)		38.41	30.53	7.90
TOTAL PROJECT COSTS		47.29	30.56	16.78

LANDSIDE

FEDERAL SHARE OF THE PROJECT COSTS

	FED SHARE	1977	1982	1987	1992
1 GA TERMINAL BUILDING AREA(SF)	0.00	0.	0.	0.	0.
2 GA AIRCRAFT LOADING POSITIONS(NUMBER)	0.00	0.	0.	0.	0.
3 GA AC LOADING & BYPASS APRON AREA(SY)	79.46	0.	0.	0.	810.
4 ITINERANT AIRCRAFT PARKING AREA(SY)	79.46	0.	0.	0.	0.
5 GA BASED AIRCRAFT TIE-DOWN AREA(SY)	79.46	0.	0.	0.	384.
6 GA CONV HANGAR BLDG AND APRON AREA(SY)	79.46	0.	0.	0.	162.
7 GA *T* HANGAR BLDG & APRON AREA(SY)	79.46	0.	0.	0.	161.
8 GA PUBLIC VEHICULAR PARKING SPACE(NO.)	0.00	0.	0.	0.	0.
9 GA PUBLIC VEHICULAR PARKING AREA(SY)	0.00	0.	0.	0.	0.
10 AIRPORT MAINTENANCE APRON AREA(SY)	79.46	0.	0.	0.	71.
11 AIRPORT MAINTENANCE BUILDING(SF)	0.00	0.	0.	0.	0.
TOTAL IN THOUSANDS OF DOLLARS		0.0	0.0	0.0	1.6

PROJECT COST LESS FEDERAL GRANTS

	FED SHARE	1977	1982	1987	1992
1 GA TERMINAL BUILDING AREA(SF)	0.00	0.	0.	0.	0.
2 GA AIRCRAFT LOADING POSITIONS(NUMBER)	0.00	0.	0.	0.	0.
3 GA AC LOADING & BYPASS APRON AREA(SY)	79.46	1020.	0.	0.	209.
4 ITINERANT AIRCRAFT PARKING AREA(SY)	79.46	0.	0.	0.	0.
5 GA BASED AIRCRAFT TIE-DOWN AREA(SY)	79.46	0.	0.	0.	99.
6 GA CONV HANGAR BLDG AND APRON AREA(SY)	79.46	816.	0.	408.	246.
7 GA *T* HANGAR BLDG & APRON AREA(SY)	79.46	1216.	0.	608.	447.
8 GA PUBLIC VEHICULAR PARKING SPACE(NO.)	0.00	0.	0.	0.	0.
9 GA PUBLIC VEHICULAR PARKING AREA(SY)	0.00	1497.	748.	748.	748.
10 AIRPORT MAINTENANCE APRON AREA(SY)	79.46	180.	36.	72.	18.
11 AIRPORT MAINTENANCE BUILDING(SF)	0.00	50.	10.	20.	25.
TOTAL IN THOUSANDS OF DOLLARS		4.8	0.8	1.9	1.8

FORSYTH

Forsyth is located in the level terrain of southeast Montana along the Yellowstone River. It is situated 45 miles east of Miles City on U. S. Route 10-12. Interstate Route 94 should be completed through Forsyth in the near future. Amtrak provides passenger service three days a week to Miles City and Billings.

The airport is three miles east of town on U. S. Route 10-12.

Coal field development in the Forsyth area has caused an increase in aviation interest and a master plan is being formulated for the airport.

It is expected that Forsyth will attract type 'C' aircraft when developed to accommodate such.

Facility Requirements

A moderate amount of land side work will be needed in 1977. Air side additions will consist of a runway extension before 1977, and a MIRL system before 1977. Costs may be found on the following pages.

NAVAIDS: An NDB will be required by 1977 to accommodate the IFR traffic demand.

Name: FORSYTH

Site Number:. 12357

County: ROSEBUD

District:. 3

PEAK HOUR IFR AND VFR DEMAND FORECASTS

	1977	1982	1987	1992
FORSYTH, MONTANA				
TOTAL PEAK HOUR VFR DEMAND	15.	16.	16.	17.
GA IFR PEAK HOUR DEMAND	1.	1.	1.	2.

OPERATIONAL DATA

DEMAND FORECAST INDICATORS

	1977	1982	1987	1992
1 TOTAL GA ANNUAL OPERATIONS	7000.0	7270.0	7300.0	7500.0
2 GA PEAK HOUR OPERATIONS	15.0	16.0	16.0	17.0
3 PERCENT GA ITINERANT OPERATIONS	30.0	33.0	37.0	40.0
4 BASED AIRCRAFT UNDER 12500 LBS	10.0	11.0	12.0	13.0
5 BASED AIRCRAFT OVER 12500 LBS	0.0	0.0	0.0	0.0

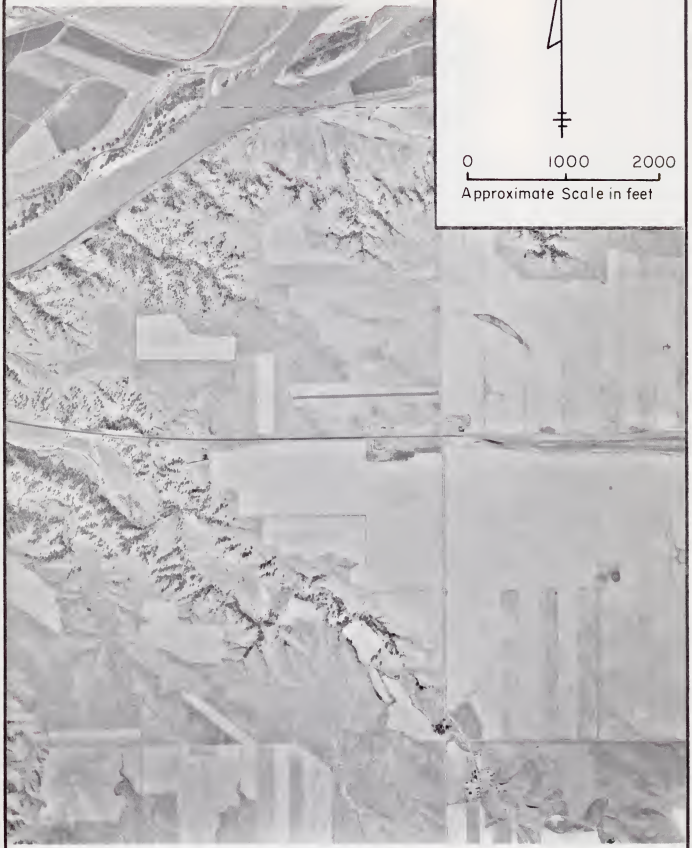
AIRCRAFT MIX AND CAPACITY FORECASTS

	1972	1977	1982	1987	1992
AIRCRAFT TYPE *A*	0	0	0	0	0
AIRCRAFT TYPE *B*	0	0	0	0	0
AIRCRAFT TYPE *C*	0	0	2	3	4
AIRCRAFT TYPE *D+E*	100	100	98	97	96
HOURLY CAPACITY VFR	77	88	99	99	99
HOURLY CAPACITY IFR	0	0	0	0	0
ANNUAL CAPACITY(000)	107	122	138	138	138

DEVELOPMENT COST SUMMARY

PLAN PERIOD	PARTICIPATION	LAND SIDE	AIR SIDE	TOTAL
BEFORE 1977	FEDERAL	$	$ 106,000	$ 106,000
	STATE/LOCAL		27,000	27,000
	TOTAL		133,000	133,000
1977	FEDERAL	6,000		6,000
	STATE/LOCAL	21,000		21,000
	TOTAL	27,000		27,000
1982	FEDERAL	3,000		3,000
	STATE/LOCAL	2,000		2,000
	TOTAL	5,000		5,000
1987	FEDERAL			
	STATE/LOCAL			
	TOTAL			
1992	FEDERAL			
	STATE/LOCAL	2,000		2,000
	TOTAL	2,000		2,000
TOTAL COSTS TO 1992	FEDERAL	9,000	106,000	115,000
	STATE/LOCAL	25,000	27,000	52,000
	TOTAL	34,000	133,000	167,000

FORSYTH



MSASP AIRFIELD DEVELOPMENT COSTS IN THOUSANDS OF 1972 DOLLARS

FORSYTH

AIRSIDE

	FED SHARE	TOTAL	FED GRANTS	STATE/LOCAL
BEFORE 1977				
1 EXTEND RUNWAY(7/25)				
A EARTHWORK	79.46	15.00	11.91	3.08
B LAND ACQUISITION	79.46	3.60	2.86	0.73
C EASEMENTS	79.46	1.20	0.95	0.24
D SITE PREPARATION	79.46	10.10	8.02	2.07
E PAVING	79.46	68.40	54.35	14.04
2 LANDING AIDS				
A MIRL	79.46	35.00	27.81	7.18
TOTAL ($000)		133.32	105.95	27.40
TOTAL PROJECT COSTS		133.32	105.95	27.40

LANDSIDE

FEDERAL SHARE OF THE PROJECT COSTS

	FED SHARE	1977	1982	1987	1992
1 GA TERMINAL BUILDING AREA(SF)	0.00	0.	0.	0.	0.
2 GA AIRCRAFT LOADING POSITIONS(NUMBER)	0.00	0.	0.	0.	0.
3 GA AC LOADING & BYPASS APRON AREA(SY)	79.46	334.	810.	0.	0.
4 ITINERANT AIRCRAFT PARKING AREA(SY)	79.46	1144.	1216.	0.	0.
5 GA BASED AIRCRAFT TIE-DOWN AREA(SY)	79.46	3554.	417.	417.	417.
6 GA CONV HANGAR BLDG AND APRON AREA(SY)	79.46	0.	0.	0.	0.
7 GA *T* HANGAR BLDG & APRON AREA(SY)	79.46	0.	0.	0.	0.
8 GA PUBLIC VEHICULAR PARKING SPACE(NO.)	0.00	0.	0.	0.	0.
9 GA PUBLIC VEHICULAR PARKING AREA(SY)	0.00	0.	0.	0.	0.
10 AIRPORT MAINTENANCE APRON AREA(SY)	79.46	1001.	39.	4.	29.
11 AIRPORT MAINTENANCE BUILDING(SF)	0.00	0.	0.	0.	0.
TOTAL IN THOUSANDS OF DOLLARS		6.0	2.5	0.4	0.4

PROJECT COST LESS FEDERAL GRANTS

	FED SHARE	1977	1982	1987	1992
1 GA TERMINAL BUILDING AREA(SF)	0.00	9750.	810.	0.	810.
2 GA AIRCRAFT LOADING POSITIONS(NUMBER)	0.00	0.	0.	0.	0.
3 GA AC LOADING & BYPASS APRON AREA(SY)	79.46	86.	209.	0.	0.
4 ITINERANT AIRCRAFT PARKING AREA(SY)	79.46	295.	314.	0.	0.
5 GA BASED AIRCRAFT TIE-DOWN AREA(SY)	79.46	918.	107.	107.	107.
6 GA CONV HANGAR BLDG AND APRON AREA(SY)	79.46	0.	0.	0.	0.
7 GA *T* HANGAR BLDG & APRON AREA(SY)	79.46	0.	0.	0.	0.
8 GA PUBLIC VEHICULAR PARKING SPACE(NO.)	0.00	0.	0.	0.	0.
9 GA PUBLIC VEHICULAR PARKING AREA(SY)	0.00	9427.	748.	0.	748.
10 AIRPORT MAINTENANCE APRON AREA(SY)	79.46	258.	10.	1.	7.
11 AIRPORT MAINTENANCE BUILDING(SF)	0.00	350.	14.	1.	10.
TOTAL IN THOUSANDS OF DOLLARS		21.1	2.2	0.1	1.7

FORTINE

The town of Fortine is located in northwest Montana just outside of the Kootenai National Forest. It is 12 miles southeast of Eureka and 39 miles northwest of Whitefish on U. S. Route 93.

The airport is two miles north of town, one mile off U. S. Route 93. Only 'D & E' aircraft type are forecasted. The present 3500 foot landing strip will be used as a taxiway, when the new 6,000 foot runway is completed.

Facility Requirements

Only minimal landside expansion will be required.

Name: FORTINE

Site Number: 12361

County: LINCOLN

District: 10

PEAK HOUR IFR AND VFR DEMAND FORECASTS

	1977	1982	1987	1992
CARTER, MONTANA				
TOTAL PEAK HOUR VFR DEMAND	1.	1.	1.	2.
GA IFR PEAK HOUR DEMAND	0.	0.	0.	0.

OPERATIONAL DATA

DEMAND FORECAST INDICATORS	1977	1982	1987	1992
1 TOTAL GA ANNUAL OPERATIONS	200.0	300.0	400.0	500.0
2 GA PEAK HOUR OPERATIONS	1.0	1.0	1.0	2.0
3 PERCENT GA ITINERANT OPERATIONS	100.0	100.0	75.0	60.0
4 BASED AIRCRAFT UNDER 12500 LBS	0.0	0.0	1.0	1.0
5 BASED AIRCRAFT OVER 12500 LBS	0.0	0.0	0.0	0.0

AIRCRAFT MIX AND CAPACITY FORECASTS

	1972	1977	1982	1987	1992
AIRCRAFT TYPE *A*	0	0	0	0	0
AIRCRAFT TYPE *B*	0	0	0	0	0
AIRCRAFT TYPE *C*	0	0	0	0	0
AIRCRAFT TYPE *D+E*	100	100	100	100	100
HOURLY CAPACITY VFR	77	88	99	99	99
HOURLY CAPACITY IFR	0	0	0	0	0
ANNUAL CAPACITY(000)	107	122	138	138	138

DEVELOPMENT COST SUMMARY

PLAN PERIOD	PARTICIPATION	LAND SIDE	AIR SIDE	TOTAL
BEFORE 1977	FEDERAL			
	STATE/LOCAL			
	TOTAL			
1977	FEDERAL	$	$	$
	STATE/LOCAL	1,000		1,000
	TOTAL	1,000		1,000
1982	FEDERAL			
	STATE/LOCAL			
	TOTAL			
1987	FEDERAL			
	STATE/LOCAL	2,000		2,000
	TOTAL	2,000		2,000
1992	FEDERAL			
	STATE/LOCAL	3,000		3,000
	TOTAL	3,000		3,000
TOTAL COSTS TO 1992	FEDERAL			
	STATE/LOCAL	6,000		6,000
	TOTAL	6,000		6,000

FORTINE

FORTINE

NO AIR SIDE DEVELOPMENTS REQUIRED

LAND SIDE

FEDERAL SHARE OF THE PROJECT COSTS

	FED SHARE	1977	1982	1987	1992
1 GA TERMINAL BUILDING AREA(SF)	0.00	0.	0.	0.	0.
2 GA AIRCRAFT LOADING POSITIONS(NUMBER)	0.00	0.	0.	0.	0.
3 GA AC LOADING & BYPASS APRON AREA(SY)	0.00	0.	0.	0.	0.
4 ITINERANT AIRCRAFT PARKING AREA(SY)	0.00	0.	0.	0.	0.
5 GA BASED AIRCRAFT TIE-DOWN AREA(SY)	0.00	0.	0.	0.	0.
6 GA CONV HANGAR BLDG AND APRON AREA(SY)	0.00	0.	0.	0.	0.
7 GA *T* HANGAR BLDG & APRON AREA(SY)	0.00	0.	0.	0.	0.
8 GA PUBLIC VEHICULAR PARKING SPACE(NO.)	0.00	0.	0.	0.	0.
9 GA PUBLIC VEHICULAR PARKIMG AREA(SY)	0.00	0.	0.	0.	0.
10 AIRPORT MAINTENANCE APRON AREA(SY)	0.00	0.	0.	0.	0.
11 AIRPORT MAINTENANCE BUILDING(SF)	0.00	0.	0.	0.	0.
TOTAL IN THOUSANDS OF DOLLARS		0.0	0.0	0.0	0.0

PROJECT COST LESS FEDERAL GRANTS

	FED SHARE	1977	1982	1987	1992
1 GA TERMINAL BUILDING AREA(SF)	0.00	0.	0.	0.	0.
2 GA AIRCRAFT LOADING POSITIONS(NUMBER)	0.00	0.	0.	0.	0.
3 GA AC LOADING & BYPASS APRON AREA(SY)	0.00	0.	0.	0.	1020.
4 ITINERANT AIRCRAFT PARKING AREA(SY)	0.00	0.	0.	0.	1530.
5 GA BASED AIRCRAFT TIE-DOWN AREA(SY)	0.00	0.	0.	525.	0.
6 GA CONV HANGAR BLDG AND APRON AREA(SY)	0.00	0.	0.	408.	0.
7 GA *T* HANGAR BLDG & APRON AREA(SY)	0.00	0.	0.	608.	0.
8 GA PUBLIC VEHICULAR PARKING SPACE(NO.)	0.00	0.	0.	0.	0.
9 GA PUBLIC VEHICULAR PARKIMG AREA(SY)	0.00	748.	0.	0.	748.
10 AIRPORT MAINTENANCE APRON AREA(SY)	0.00	36.	18.	18.	18.
11 AIRPORT MAINTENANCE BUILDING(SF)	0.00	10.	5.	5.	5.
TOTAL IN THOUSANDS OF DOLLARS		0.8	0.0	1.6	3.3

FORT BENTON

Fort Benton is situated in northern Montana along the Missouri River, 40 miles northeast of Great Falls off U. S. Route 87.

The airport is just north of town.

Facility Requirements

A moderate amount of land side addition to terminal building area and public vehicular parking area in 1977 is projected. Runway ((4-22) should be extended and strengthened in 1987.

Name: FORT BENTON

Site Number:. 12360

County: CHOUTEAU

Oistrict:. 5

PEAK HOUR IFR AND VFR DEMAND FORECASTS

	1977	1982	1987	1992
FORT BENTON, MONTANA				
TOTAL PEAK HOUR VFR DEMAND	15.	16.	17.	18.
GA IFR PEAK HOUR DEMAND	1.	1.	2.	2.

OPERATIONAL DATA

DEMAND FORECAST INDICATORS

	1977	1982	1987	1992
1 TOTAL GA ANNUAL OPERATIONS	7000.0	7190.0	7350.0	7710.0
2 GA PEAK HOUR OPERATIONS	15.0	16.0	17.0	18.0
3 PERCENT GA ITINERANT OPERATIONS	30.0	32.0	34.0	35.0
4 BASED AIRCRAFT UNDER 12500 LBS	11.0	11.0	12.0	12.0
5 BASED AIRCRAFT OVER 12500 LBS	0.0	0.0	0.0	0.0

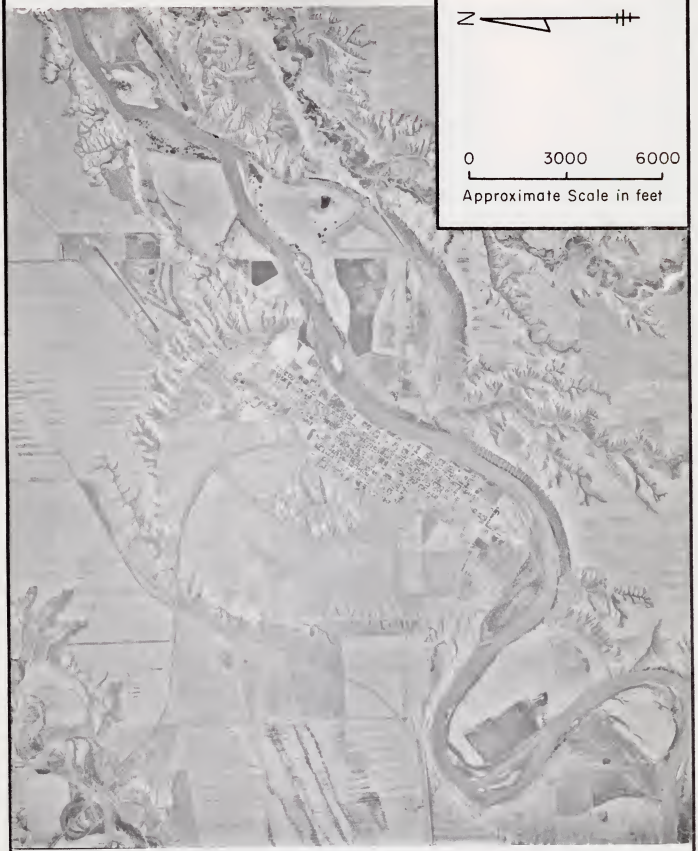
AIRCRAFT MIX AND CAPACITY FORECASTS

	1972	1977	1982	1987	1992
AIRCRAFT TYPE *A*	0	0	0	0	0
AIRCRAFT TYPE *B*	0	0	0	0	0
AIRCRAFT TYPE *C*	0	0	0	2	4
AIRCRAFT TYPE *D+E*	100	100	100	98	96
HOURLY CAPACITY VFR	77	88	99	99	99
HOURLY CAPACITY IFR	0	0	0	0	0
ANNUAL CAPACITY(000)	107	122	138	138	138

DEVELOPMENT COST SUMMARY

PLAN PERIOD	PARTICIPATION	LAND SIDE	AIR SIDE	TOTAL
BEFORE 1977	FEDERAL			
	STATE/LOCAL			
	TOTAL			
1977	FEDERAL	$ 4,000	$ 6,000	$ 10,000
	STATE/LOCAL	20,000	2,000	22,000
	TOTAL	24,000	8,000	32,000
1982	FEDERAL	1,000		1,000
	STATE/LOCAL	2,000		2,000
	TOTAL	3,000		3,000
1987	FEDERAL		222,000	222,000
	STATE/LOCAL	2,000	58,000	60,000
	TOTAL	2,000	280,000	282,000
1992	FEDERAL			
	STATE/LOCAL	2,000		2,000
	TOTAL	2,000		2,000
TOTAL COSTS TO 1992	FEDERAL	5,000	228,000	233,000
	STATE/LOCAL	26,000	60,000	86,000
	TOTAL	31,000	288,000	319,000

FORT BENTON



MSASP AIRFIELD DEVELOPMENT COSTS IN THOUSANDS OF 1972 DOLLARS

AIRSIDE

FORT BENTON

	FED SHARE	TOTAL	FED GRANTS	STATE/LOCAL
1977				
1 NDB	79.46	8.00	6.35	1.64
TOTAL ($000)		8.00	6.36	1.64
1987				
2 EXTEND RUNWAY(4/22)	79.46	130.00	103.29	26.70
3 OVERLAY RUNWAY(4/22)	79.46	150.00	119.18	30.81
TOTAL ($000)		280.01	222.49	57.52
TOTAL PROJECT COSTS		288.01	228.85	59.17

LANDSIDE

FEDERAL SHARE OF THE PROJECT COSTS

	FED SHARE	1977	1982	1987	1992
1 GA TERMINAL BUILDING AREA(SF)	0.00	0.	0.	0.	0.
2 GA AIRCRAFT LOADING POSITIONS(NUMBER)	0.00	0.	0.	0.	0.
3 GA AC LOADING & BYPASS APRON AREA(SY)	79.46	0.	0.	0.	0.
4 ITINERANT AIRCRAFT PARKING AREA(SY)	79.46	0.	1120.	0.	0.
5 GA BASED AIRCRAFT TIE-DOWN AREA(SY)	79.46	3304.	0.	417.	0.
6 GA CONV HANGAR BLDG AND APRON AREA(SY)	79.46	0.	0.	0.	0.
7 GA *T* HANGAR BLDG & APRON AREA(SY)	79.46	0.	0.	0.	0.
8 GA PUBLIC VEHICULAR PARKING SPACE(NO.)	0.00	0.	0.	0.	0.
9 GA PUBLIC VEHICULAR PARKIMG AREA(SY)	0.00	0.	0.	0.	0.
10 AIRPORT MAINTENANCE APRON AREA(SY)	79.46	1001.	27.	29.	51.
11 AIRPORT MAINTENANCE BUILDING(SF)	0.00	0.	0.	0.	0.
TOTAL IN THOUSANDS OF DOLLARS		4.3	1.1	0.4	0.1

PROJECT COST LESS FEDERAL GRANTS

	FED SHARE	1977	1982	1987	1992
1 GA TERMINAL BUILDING AREA(SF)	0.00	9150.	810.	810.	810.
2 GA AIRCRAFT LOADING POSITIONS(NUMBER)	0.00	0.	0.	0.	0.
3 GA AC LOADING & BYPASS APRON AREA(SY)	79.46	0.	289.	0.	0.
4 ITINERANT AIRCRAFT PARKING AREA(SY)	79.46	854.	0.	107.	0.
5 GA BASED AIRCRAFT TIE-DOWN AREA(SY)	79.46	0.	0.	0.	0.
6 GA CONV HANGAR BLDG AND APRON AREA(SY)	79.46	0.	0.	0.	0.
7 GA *T* HANGAR BLDG & APRON AREA(SY)	79.46	0.	0.	0.	0.
8 GA PUBLIC VEHICULAR PARKING SPACE(NO.)	0.00	0.	0.	0.	0.
9 GA PUBLIC VEHICULAR PARKIMG AREA(SY)	0.00	9427.	748.	748.	748.
10 AIRPORT MAINTENANCE APRON AREA(SY)	79.46	258.	7.	6.	13.
11 AIRPORT MAINTENANCE BUILDING(SF)	0.00	350.	10.	8.	18.
TOTAL IN THOUSANDS OF DOLLARS		20.0	1.9	1.7	1.6

FORT SMITH

Fort Smith is situated in southern Montana in the Bighorn Canyon National Recreation Area. The Crow Indian Reservation is just outside the town.

The airport is one mile north of town, across the Bighorn River and is owned by the National Park Service

The present runway will accommodate the peak hour traffic demand throughout the forecast period. No IFR traffic demand is forecasted, through 1992.

Facility Requirements

Only minimal land side requirements will be necessary.

Name: FORT SMITH

Site Number: 12363.2

County: BIG HORN

District: 7

PEAK HOUR IFR AND VFR DEMAND FORECASTS

	1977	1982	1987	1992
FT. SMITH, MONTANA				
TOTAL PEAK HOUR VFR DEMAND	1.	1.	1.	2.
GA IFR PEAK HOUR DEMAND	0.	0.	0.	0.

OPERATIONAL DATA

DEMAND FORECAST INDICATORS

	1977	1982	1987	1992
1 TOTAL GA ANNUAL OPERATIONS	200.0	300.0	400.0	500.0
2 GA PEAK HOUR OPERATIONS	1.0	1.0	1.0	2.0
3 PERCENT GA ITINERANT OPERATIONS	100.0	100.0	75.0	60.0
4 BASED AIRCRAFT UNDER 12500 LBS	0.0	0.0	1.0	1.0
5 BASED AIRCRAFT OVER 12500 LBS	0.0	0.0	0.0	0.0

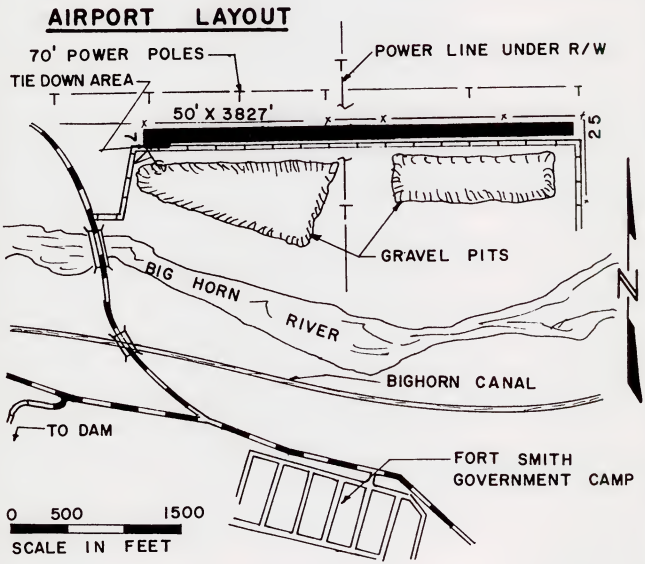
AIRCRAFT MIX AND CAPACITY FORECASTS

	1972	1977	1982	1987	1992
AIRCRAFT TYPE *A*	0	0	0	0	0
AIRCRAFT TYPE *B*	0	0	0	0	0
AIRCRAFT TYPE *C*	0	0	0	0	0
AIRCRAFT TYPE *D+E*	100	100	100	100	100
HOURLY CAPACITY VFR	77	88	99	99	99
HOURLY CAPACITY IFR	0	0	0	0	0
ANNUAL CAPACITY(000)	107	122	138	138	138

DEVELOPMENT COST SUMMARY

PLAN PERIOD	PARTICIPATION	LAND SIDE	AIR SIDE	TOTAL
BEFORE 1977	FEDERAL			
	STATE/LOCAL			
	TOTAL			
1977	FEDERAL	$ 1,000	$	$ 1,000
	STATE/LOCAL			
	TOTAL	1,000		1,000
1982	FEDERAL			
	STATE/LOCAL			
	TOTAL			
1987	FEDERAL	1,000		1,000
	STATE/LOCAL			
	TOTAL	1,000		1,000
1992	FEDERAL	2,000		2,000
	STATE/LOCAL			
	TOTAL	2,000		2,000
TOTAL COSTS TO 1992	FEDERAL	4,000		4,000
	STATE/LOCAL			
	TOTAL	4,000		4,000

FT. SMITH


AIRPORT LAYOUT
70' POWER POLES
TIE DOWN AREA
POWER LINE UNDER R/W
50' X 3827'
25
GRAVEL PITS
BIG HORN RIVER
BIGHORN CANAL
TO DAM
FORT SMITH
GOVERNMENT CAMP
N
0 500 1500
SCALE IN FEET

FORT SMITH

NO AIR SIDE DEVELOPMENTS REQUIRED

CASE 1 AIRPORT FT. SMITH, MONTANA

MONTANA STATE AIRPORT SYSTEM PLAN

FEDERAL SHARE OF THE PROJECT COSTS

LANDSIDE

	FED SHARE	1977	1982	1987	1992
1 GA TERMINAL BUILDING AREA(SF)	100.00	0.	0.	0.	0.
2 GA AIRCRAFT LOADING POSITIONS(NUMBER)	100.00	0.	0.	0.	0.
3 GA AC LOADING & BYPASS APRON AREA(SY)	100.00	0.	0.	0.	0.
4 ITINERANT AIRCRAFT PARKING AREA(SY)	100.00	0.	0.	0.	1530.
5 GA BASED AIRCRAFT TIE-DOWN AREA(SY)	100.00	0.	0.	0.	0.
6 GA CONV HANGAR BLDG AND APRON AREA(SY)	100.00	0.	0.	408.	0.
7 GA *T* HANGAR BLDG & APRON AREA(SY)	100.00	0.	0.	608.	0.
8 GA PUBLIC VEHICULAR PARKING SPACE(NO.)	100.00	0.	0.	0.	0.
9 GA PUBLIC VEHICULAR PARKING AREA(SY)	100.00	748.	0.	0.	748.
10 AIRPORT MAINTENANCE APRON AREA(SY)	100.00	36.	18.	18.	18.
11 AIRPORT MAINTENANCE BUILDING(SF)	100.00	10.	5.	5.	5.
TOTAL IN THOUSANDS OF DOLLARS		0.8	0.0	1.0	2.3

PROJECT COST LESS FEDERAL GRANTS

LANDSIDE

	FED SHARE	1977	1982	1987	1992
1 GA TERMINAL BUILDING AREA(SF)	100.00	0.	0.	0.	0.
2 GA AIRCRAFT LOADING POSITIONS(NUMBER)	100.00	0.	0.	0.	0.
3 GA AC LOADING & BYPASS APRON AREA(SY)	100.00	0.	0.	0.	0.
4 ITINERANT AIRCRAFT PARKING AREA(SY)	100.00	0.	0.	0.	0.
5 GA BASED AIRCRAFT TIE-DOWN AREA(SY)	100.00	0.	0.	0.	0.
6 GA CONV HANGAR BLDG AND APRON AREA(SY)	100.00	0.	0.	0.	0.
7 GA *T* HANGAR BLDG & APRON AREA(SY)	100.00	0.	0.	0.	0.
8 GA PUBLIC VEHICULAR PARKING SPACE(NO.)	100.00	0.	0.	0.	0.
9 GA PUBLIC VEHICULAR PARKING AREA(SY)	100.00	0.	0.	0.	0.
10 AIRPORT MAINTENANCE APRON AREA(SY)	100.00	0.	0.	0.	0.
11 AIRPORT MAINTENANCE BUILDING(SF)	100.00	0.	0.	0.	0.
TOTAL IN THOUSANDS OF DOLLARS		0.0	0.0	0.0	0.0

GERALDINE

The town of Geraldine is situated 15 miles southwest of the White Cliffs Area of Montana. Fort Benton is 27 miles to the north on county route 230.

The airport is located just south of Geraldine. 'D & E' aircraft type is predicted for the forecast period.

Facility Requirements

A moderate amount of addition should be completed in 1977 to terminal building area and public vehicular parking area. Air side expansion will require a runway extension before 1977.

NAVAIDS: An NDB will be required by 1977 to accommodate the IFR traffic demand.

Name: GERALDINE

Site Number: 12370

County: CHOUTEAU

District: 5

PEAK HOUR IFR AND VFR DEMAND FORECASTS

	1977	1982	1987	1992
GERALDINE, MONTANA				
TOTAL PEAK HOUR VFR DEMAND	13.	14.	15.	16.
GA IFR PEAK HOUR DEMAND	1.	1.	1.	2.

OPERATIONAL DATA

DEMAND FORECAST INDICATORS	1977	1982	1987	1992
1 TOTAL GA ANNUAL OPERATIONS	5000.0	5670.0	6000.0	6330.0
2 GA PEAK HOUR OPERATIONS	13.0	14.0	15.0	16.0
3 PERCENT GA ITINERANT OPERATIONS	30.0	30.0	30.0	30.0
4 BASED AIRCRAFT UNDER 12500 LBS	6.0	7.0	8.0	9.0
5 BASED AIRCRAFT OVER 12500 LBS	0.0	0.0	0.0	0.0

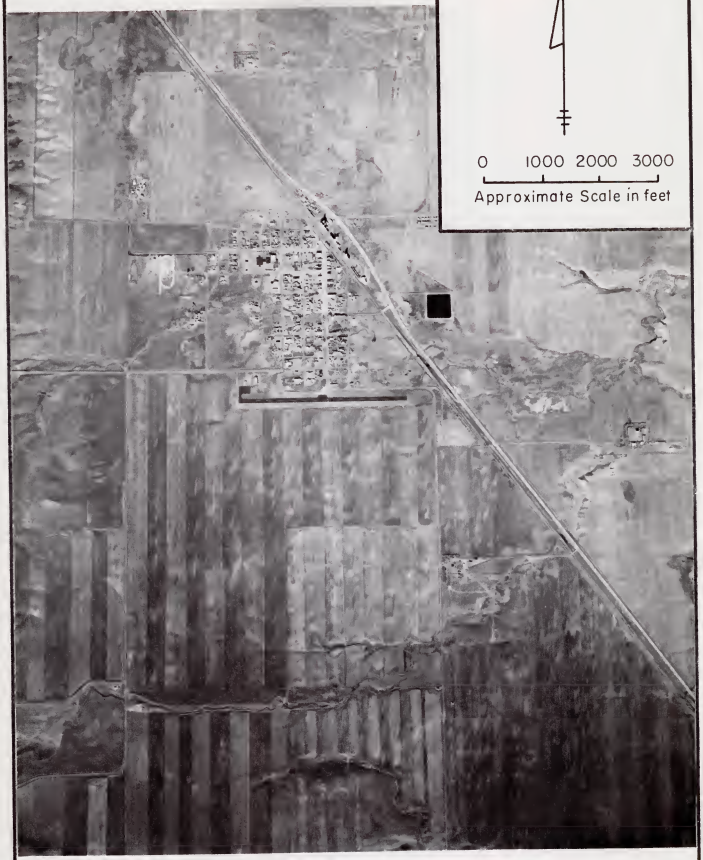
AIRCRAFT MIX AND CAPACITY FORECASTS

	1972	1977	1982	1987	1992
AIRCRAFT TYPE *A*	0	0	0	0	0
AIRCRAFT TYPE *B*	0	0	0	0	0
AIRCRAFT TYPE *C*	0	0	0	0	0
AIRCRAFT TYPE *D+E*	100	100	100	100	100
HOURLY CAPACITY VFR	77	88	99	99	99
HOURLY CAPACITY IFR	0	0	0	0	0
ANNUAL CAPACITY(000)	107	122	138	138	138

DEVELOPMENT COST SUMMARY

PLAN PERIOD	PARTICIPATION	LAND SIDE	AIR SIDE	TOTAL
BEFORE 1977	FEDERAL	$	$ 62,000	$ 62,000
	STATE/LOCAL		16,000	16,000
	TOTAL		78,000	78,000
1977	FEDERAL	4,000	6,000	10,000
	STATE/LOCAL	22,000	2,000	24,000
	TOTAL	26,000	8,000	34,000
1982	FEDERAL	1,000		1,000
	STATE/LOCAL	2,000		2,000
	TOTAL	3,000		3,000
1987	FEDERAL	1,000		1,000
	STATE/LOCAL	2,000		2,000
	TOTAL	3,000		3,000
1992	FEDERAL	1,000		1,000
	STATE/LOCAL	2,000		2,000
	TOTAL	3,000		3,000
TOTAL COSTS TO 1992	FEDERAL	7,000	68,000	75,000
	STATE/LOCAL	28,000	18,000	46,000
	TOTAL	35,000	86,000	121,000

GERALDINE



MSASP AIRFIELD DEVELOPMENT COSTS IN THOUSANDS OF 1972 DOLLARS

GERALDINE

	FED SHARE	TOTAL	FED GRANTS	STATE/LOCAL
BEFORE 1977				
1 EXTEND RUNWAY(7/26)	79.46	12.60	10.01	2.58
A EARTHWORK	79.46	4.27	3.39	0.87
B LAND ACQUISITION	79.46	0.80	0.63	0.16
C EASEMENTS	79.46	8.90	7.07	1.82
D SITE PREP	79.46	0.25	0.19	0.05
E OBSTRUCTION REMOVAL	79.46	46.60	37.02	9.57
F PAVING				
2 LANDING AIDS	79.46	4.90	3.89	1.00
A EXTEND LIGHTING SYSTEM				
TOTAL ($000)		78.35	62.27	16.12
1977				
3 NAVAIDS	79.46	8.00	6.35	1.64
A NDB				
TOTAL ($000)		8.00	6.36	1.64
TOTAL PROJECT COSTS		86.36	68.63	17.77

LANDSIDE

FEDERAL SHARE OF THE PROJECT COSTS

	FED SHARE	1977	1982	1987	1992
1 GA TERMINAL BUILDING AREA(SF)	0.00	0.	0.	0.	0.
2 GA AIRCRAFT LOADING POSITIONS(NUMBER)	0.00	0.	0.	0.	0.
3 GA AC LOADING & BYPASS APRON AREA(SY)	79.46	0.	0.	0.	0.
4 ITINERANT AIRCRAFT PARKING AREA(SY)	79.46	524.	0.	0.	0.
5 GA BASED AIRCRAFT TIE-DOWN AREA(SY)	79.46	2505.	417.	417.	417.
6 GA CONV HANGAR BLDG AND APRON AREA(SY)	79.46	0.	0.	0.	0.
7 GA *T* HANGAR BLDG & APRON AREA(SY)	0.00	0.	0.	0.	0.
8 GA PUBLIC VEHICULAR PARKING SPACE(NO.)	0.00	0.	0.	0.	0.
9 GA PUBLIC VEHICULAR PARKING AREA(SY)	79.46	715.	96.	47.	47.
10 AIRPORT MAINTENANCE APRON AREA(SY)	0.00	0.	0.	0.	0.
11 AIRPORT MAINTENANCE BUILDING(SF)		3.7	0.5	0.5	0.5
TOTAL IN THOUSANDS OF DOLLARS					

PROJECT COST LESS FEDERAL GRANTS

	FED SHARE	1977	1982	1987	1992
1 GA TERMINAL BUILDING AREA(SF)	0.00	10530.	810.	810.	810.
2 GA AIRCRAFT LOADING POSITIONS(NUMBER)	0.00	0.	0.	0.	0.
3 GA AC LOADING & BYPASS APRON AREA(SY)	79.46	0.	0.	0.	0.
4 ITINERANT AIRCRAFT PARKING AREA(SY)	79.46	135.	0.	0.	0.
5 GA BASED AIRCRAFT TIE-DOWN AREA(SY)	79.46	647.	107.	107.	107.
6 GA CONV HANGAR BLDG AND APRON AREA(SY)	79.46	0.	0.	0.	0.
7 GA *T* HANGAR BLDG & APRON AREA(SY)	0.00	0.	0.	0.	0.
8 GA PUBLIC VEHICULAR PARKING SPACE(NO.)	0.00	9730.	748.	748.	748.
9 GA PUBLIC VEHICULAR PARKING AREA(SY)	79.46	184.	24.	12.	12.
10 AIRPORT MAINTENANCE APRON AREA(SY)	0.00	250.	34.	16.	17.
11 AIRPORT MAINTENANCE BUILDING(SF)		21.5	1.7	1.7	1.7
TOTAL IN THOUSANDS OF DOLLARS					

HAMILTON

The city is located in western Montana in the Bitterroot National Forest area, 47 miles south of Missoula on U.S. Route 93.

The airport is located one mile east of town. Some 'C' type aircraft are operating now and will increase throughout the forecast period. A master plan is in progress.

Facility Requirements

Moderate land side expansion will be necessary in all period increments. Air side addition will require a runway overlay in 1977 and a large runway extension in 1987.

Name: HAMILTON

Site Number:. 12384

County: RAVALLI

District:. 11

PEAK HOUR IFR AND VFR DEMAND FORECASTS

	1977	1982	1987	1992
HAMILTON, MONTANA				
TOTAL PEAK HOUR VFR DEMAND	20.	24.	28.	32.
GA IFR PEAK HOUR DEMAND	1.	2.	3.	4.

OPERATIONAL DATA

DEMAND FORECAST INDICATORS

	1977	1982	1987	1992
1 TOTAL GA ANNUAL OPERATIONS	10250.0	12150.0	14250.0	16500.0
2 GA PEAK HOUR OPERATIONS	20.0	24.0	28.0	32.0
3 PERCENT GA ITINERANT OPERATIONS	40.0	40.0	40.0	40.0
4 BASED AIRCRAFT UNDER 12500 LBS	45.0	50.0	55.0	65.0
5 BASED AIRCRAFT OVER 12500 LBS	0.0	1.0	1.0	1.0

AIRCRAFT MIX AND CAPACITY FORECASTS

	1972	1977	1982	1987	1992
AIRCRAFT TYPE *A*	0	0	0	0	0
AIRCRAFT TYPE *B*	0	0	0	0	0
AIRCRAFT TYPE *C*	2	3	7	13	20
AIRCRAFT TYPE *D+E*	98	97	93	87	80
HOURLY CAPACITY VFR	77	88	99	99	99
HOURLY CAPACITY IFR	0	52	52	52	52
ANNUAL CAPACITY(000)	107	122	138	142	155

DEVELOPMENT COST SUMMARY

PLAN PERIOD	PARTICIPATION	LAND SIDE	AIR SIDE	TOTAL
BEFORE 1977	FEDERAL			
	STATE/LOCAL			
	TOTAL			
1977	FEDERAL	$ 11,000	$ 70,000	$ 81,000
	STATE/LOCAL	17,000	18,000	35,000
	TOTAL	28,000	88,000	116,000
1982	FEDERAL	6,000		6,000
	STATE/LOCAL	9,000		9,000
	TOTAL	15,000		15,000
1987	FEDERAL	5,000	439,000	444,000
	STATE/LOCAL	9,000	113,000	122,000
	TOTAL	14,000	552,000	566,000
1992	FEDERAL	8,000		8,000
	STATE/LOCAL	10,000		10,000
	TOTAL	18,000		18,000
TOTAL COSTS TO 1992	FEDERAL	30,000	509,000	539,000
	STATE/LOCAL	45,000	131,000	176,000
	TOTAL	75,000	640,000	715,000

HAMILTON

MSASP AIRFIELD DEVELOPMENT COSTS IN THOUSANDS OF 1972 DOLLARS

HAMILTON

AIRSIDE

	FED SHARE	TOTAL	FED GRANTS	STATE/LOCAL
1977				
1 OVERLAY RUNWAY(16/34)	79.46	87.50	69.52	17.97
2 OBSTRUCTION REMOVAL	79.46	0.50	0.39	0.10
TOTAL ($000)		88.00	69.93	18.08
1987				
2 EXTEND RUNWAY		231.75	184.14	47.60
A EARTHWORK	79.46	12.50	9.93	2.56
B LAND ACQUISITION	79.46	0.34	0.27	0.06
C EASEMENTS	79.46	21.60	17.16	4.43
D SITE PREP	79.46	0.50	0.39	0.10
E OBSTRUCTION REMOVAL	79.46	7.80	6.19	1.60
F DRAINAGE	79.46	265.00	210.56	54.43
G PAVING	79.46			
3 LANDING AIDS		12.80	10.17	2.62
A EXTEND LIGHTING SYSTEM	79.46			
TOTAL ($000)		552.32	438.88	113.48
TOTAL PROJECT COSTS		640.33	508.82	131.56

LANDSIDE

FEDERAL SHARE OF THE PROJECT COSTS

	FED SHARE	1977	1982	1987	1992
1 GA TERMINAL BUILDING AREA(SF)	0.00	0.	0.	0.	0.
2 GA AIRCRAFT LOADING POSITIONS(NUMBER)	0.00	0.	0.	0.	0.
3 GA AC LOADING & BYPASS APRON AREA(SY)	79.46	0.	0.	95.	0.
4 ITINERANT AIRCRAFT PARKING AREA(SY)	79.46	1669.	1216.	1216.	0.
5 GA BASED AIRCRAFT TIE-DOWN AREA(SY)	79.46	6856.	3158.	2086.	4172.
6 GA CONV HANGAR BLDG AND APRON AREA(SY)	79.46	0.	0.	0.	0.
7 GA *T* HANGAR BLDG & APRON AREA(SY)	79.46	2462.	1609.	1609.	3219.
8 GA PUBLIC VEHICULAR PARKING SPACE(NO.)	0.00	0.	0.	0.	0.
9 GA PUBLIC VEHICULAR PARKIMG AREA(SY)	0.00	0.	0.	0.	0.
10 AIRPORT MAINTENANCE APRON AREA(SY)	79.46	0.	164.	300.	322.
11 AIRPORT MAINTENANCE BUILDING(SF)	0.00	0.	0.	0.	0.
TOTAL IN THOUSANDS OF DOLLARS		11.0	6.2	5.3	7.7

PROJECT COST LESS FEDERAL GRANTS

	FED SHARE	1977	1982	1987	1992
1 GA TERMINAL BUILDING AREA(SF)	0.00	2200.	3240.	3240.	3240.
2 GA AIRCRAFT LOADING POSITIONS(NUMBER)	0.00	0.	0.	0.	0.
3 GA AC LOADING & BYPASS APRON AREA(SY)	79.46	0.	0.	24.	0.
4 ITINERANT AIRCRAFT PARKING AREA(SY)	79.46	431.	314.	314.	0.
5 GA BASED AIRCRAFT TIE-DOWN AREA(SY)	79.46	1772.	816.	539.	1078.
6 GA CONV HANGAR BLDG AND APRON AREA(SY)	79.46	0.	0.	0.	0.
7 GA *T* HANGAR BLDG & APRON AREA(SY)	79.46	2186.	1429.	1429.	2858.
8 GA PUBLIC VEHICULAR PARKING SPACE(NO.)	0.00	0.	0.	0.	0.
9 GA PUBLIC VEHICULAR PARKIMG AREA(SY)	0.00	10469.	2994.	2994.	2994.
10 AIRPORT MAINTENANCE APRON AREA(SY)	79.46	0.	42.	77.	83.
11 AIRPORT MAINTENANCE BUILDING(SF)	0.00	0.	0.	0.	0.
TOTAL IN THOUSANDS OF DOLLARS		17.1	8.8	8.6	10.3

HARDIN

Hardin is located in the plains area of southern Montana on the Crow Indian Reservation, 47 miles east of Billings. Interstate 90 is complete through Hardin.

The Fairgrounds Airpark is located on the southside of town. Current aircraft type is 'D & E' with 'C' type aircraft beginning in 1982. The southeast portion of town may be effected by a noise problem if operations occur from this area, therefore, it is recommended that restrictive zoning be considered to insure community developments compatible with the airport.

Facility Requirements

Extensive land side addition will be needed in 1977 for terminal building area and public vehicular parking area. Two alternatives for air side expansion were developed. The selected alternative includes a runway extension and extensive hanger relocation before 1977, and a runway overlay in 1987.

NAVAIDS: An NDB should be installed by 1977, to accommodate the IFR traffic demand.

Name: HARDIN

Site Number: 12385

County: BIG HORN

District: 7

PEAK HOUR IFR AND VFR DEMAND FORECASTS

	1977	1982	1987	1992
HARDIN, MONTANA				
TOTAL PEAK HOUR VFR DEMAND	21.	22.	23.	24.
GA IFR PEAK HOUR DEMAND	1.	2.	2.	3.

OPERATIONAL DATA

DEMAND FORECAST INDICATORS	1977	1982	1987	1992
1 TOTAL GA ANNUAL OPERATIONS	9670.0	9690.0	9710.0	10000.0
2 GA PEAK HOUR OPERATIONS	21.0	22.0	23.0	24.0
3 PERCENT GA ITINERANT OPERATIONS	30.0	32.0	34.0	35.0
4 BASED AIRCRAFT UNDER 12500 LBS	14.0	15.0	16.0	17.0
5 BASED AIRCRAFT OVER 12500 LBS	0.0	0.0	0.0	0.0

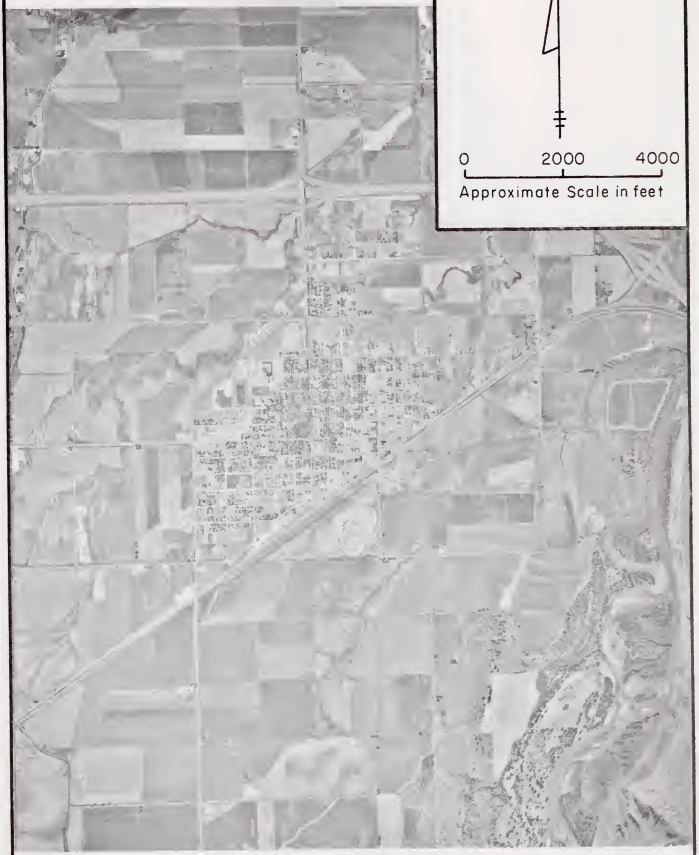
AIRCRAFT MIX AND CAPACITY FORECASTS

	1972	1977	1982	1987	1992
AIRCRAFT TYPE *A*	0	0	0	0	0
AIRCRAFT TYPE *B*	0	0	0	0	0
AIRCRAFT TYPE *C*	0	0	3	6	10
AIRCRAFT TYPE *D+E*	100	100	97	94	90
HOURLY CAPACITY VFR	77	88	99	99	99
HOURLY CAPACITY IFR	0	0	0	0	0
ANNUAL CAPACITY(000)	107	122	138	138	138

DEVELOPMENT COST SUMMARY

PLAN PERIOD	PARTICIPATION	LAND SIDE	AIR SIDE	TOTAL
BEFORE 1977	FEDERAL	$	$ 80,000	$ 80,000
	STATE/LOCAL		21,000	21,000
	TOTAL		101,000	101,000
1977	FEDERAL	3,000	6,000	9,000
	STATE/LOCAL	31,000	2,000	33,000
	TOTAL	34,000	8,000	42,000
1982	FEDERAL	1,000		1,000
	STATE/LOCAL	2,000		2,000
	TOTAL	3,000		3,000
1987	FEDERAL		47,000	47,000
	STATE/LOCAL	2,000	12,000	14,000
	TOTAL	2,000	59,000	61,000
1992	FEDERAL			
	STATE/LOCAL	2,000		2,000
	TOTAL	2,000		2,000
TOTAL COSTS TO 1992	FEDERAL	4,000	133,000	137,000
	STATE/LOCAL	37,000	35,000	72,000
	TOTAL	41,000	168,000	209,000

HARDIN



MSASP AIRFIELD DEVELOPMENT COSTS IN THOUSANDS OF 1972 DOLLARS

HARDIN

RIVERSIDE

	FED SHARE	TOTAL	FED GRANTS	STATE/LOCAL
BEFORE 1977				
1 EXTEND RUNWAY(4/22)				
A EARTHWORK	79.46	15.00	11.91	3.08
B LAND ACQUISITION	79.46	0.20	0.15	0.04
C EASEMENTS	79.46	0.10	0.07	0.02
D SITE PREP	79.46	3.00	2.38	0.61
E OBSTRUCTION REMOVAL	79.46	80.00	63.56	16.43
F PAVING	79.46	2.80	2.22	0.57
TOTAL ($000)		101.12	80.36	20.79
1977				
3 NAVAIDS				
A NDB	79.46	8.00	6.35	1.64
TOTAL ($000)		8.00	6.36	1.64
1987				
2 RUNWAY OVERLAY	79.46	59.20	47.04	12.15
TOTAL ($000)		59.20	47.04	12.16
TOTAL PROJECT COSTS		168.33	133.77	34.60

LANDSIDE

FEDERAL SHARE OF THE PROJECT COSTS

	FED SHARE	1977	1982	1987	1992
1 GA TERMINAL BUILDING AREA(SF)	0.00	0.	0.	0.	0.
2 GA AIRCRAFT LOADING POSITIONS(NUMBER)	0.00	0.	0.	0.	0.
3 GA AC LOADING & BYPASS APRON AREA(SY)	79.46	0.	0.	0.	0.
4 ITINERANT AIRCRAFT PARKING AREA(SY)	79.46	1740.	1210.	0.	0.
5 GA BASED AIRCRAFT TIE-DOWN AREA(SY)	79.46	0.	0.	0.	0.
6 GA CONV HANGAR BLDG AND APRON AREA(SY)	79.46	0.	0.	0.	0.
7 GA *T* HANGAR BLDG & APRON AREA(SY)	79.46	0.	0.	0.	0.
8 GA PUBLIC VEHICULAR PARKING SPACE(NO.)	0.00	0.	0.	0.	0.
9 GA PUBLIC VEHICULAR PARKING AREA(SY)	0.00	0.	0.	0.	0.
10 AIRPORT MAINTENANCE APRON AREA(SY)	79.46	739.	3.	3.	41.
11 AIRPORT MAINTENANCE BUILDING(SF)	0.00	0.	0.	0.	0.
TOTAL IN THOUSANDS OF DOLLARS		2.5	1.2	0.0	0.0

PROJECT COST LESS FEDERAL GRANTS

	FED SHARE	1977	1982	1987	1992
1 GA TERMINAL BUILDING AREA(SF)	0.00	16010.	810.	810.	810.
2 GA AIRCRAFT LOADING POSITIONS(NUMBER)	0.00	0.	0.	0.	0.
3 GA AC LOADING & BYPASS APRON AREA(SY)	79.46	0.	0.	0.	0.
4 ITINERANT AIRCRAFT PARKING AREA(SY)	79.46	449.	314.	0.	0.
5 GA BASED AIRCRAFT TIE-DOWN AREA(SY)	79.46	0.	0.	0.	0.
6 GA CONV HANGAR BLDG AND APRON AREA(SY)	79.46	0.	0.	0.	0.
7 GA *T* HANGAR BLDG & APRON AREA(SY)	79.46	0.	0.	0.	0.
8 GA PUBLIC VEHICULAR PARKING SPACE(NO.)	0.00	0.	0.	0.	0.
9 GA PUBLIC VEHICULAR PARKING AREA(SY)	0.00	13917.	748.	748.	748.
10 AIRPORT MAINTENANCE APRON AREA(SY)	79.46	191.	0.	0.	10.
11 AIRPORT MAINTENANCE BUILDING(SF)	0.00	0.	0.	0.	0.
TOTAL IN THOUSANDS OF DOLLARS		30.6	1.9	1.6	1.6

HARLEM

The town of Harlem is situated in northern Montana just north of the Fort Belknap Indian Reservation, 33 miles east of Havre On U. S. Route 2 and 40 miles from the Canadian border.

The airport is two miles north of town off county route 241. Small 'C' type aircraft is expected by 1982.

Facility Requirements

Terminal building area and public vehicular parking area will need moderate expansion in 1977. Air side addition includes a landing strip widening and land purchase before 1977 and a runway overlay in 1992.

NAVAIDS: An NDB should be installed by 1977 to accommodate the forecasted IFR traffic demand.

Name: HARLEM

Site Number:. 12390

County:. BLAINE

Oistrict:. 4

PEAK HOUR IFR AND VFR DEMAND FORECASTS

	1977	1982	1987	1992
HARLEM/MONTANA				
TOTAL PEAK HOUR VFR DEMAND	13.	14.	15.	17.
GA IFR PEAK HOUR DEMAND	1.	1.	1.	2.

OPERATIONAL DATA

DEMAND FORECAST INDICATORS	1977	1982	1987	1992
1 TOTAL GA ANNUAL OPERATIONS	6000.0	6330.0	7000.0	7670.0
2 GA PEAK HOUR OPERATIONS	13.0	14.0	15.0	17.0
3 PERCENT GA ITINERANT OPERATIONS	30.0	30.0	30.0	30.0
4 BASED AIRCRAFT UNDER 12500 LBS	9.0	10.0	11.0	12.0
5 BASED AIRCRAFT OVER 12500 LBS	0.0	0.0	0.0	0.0

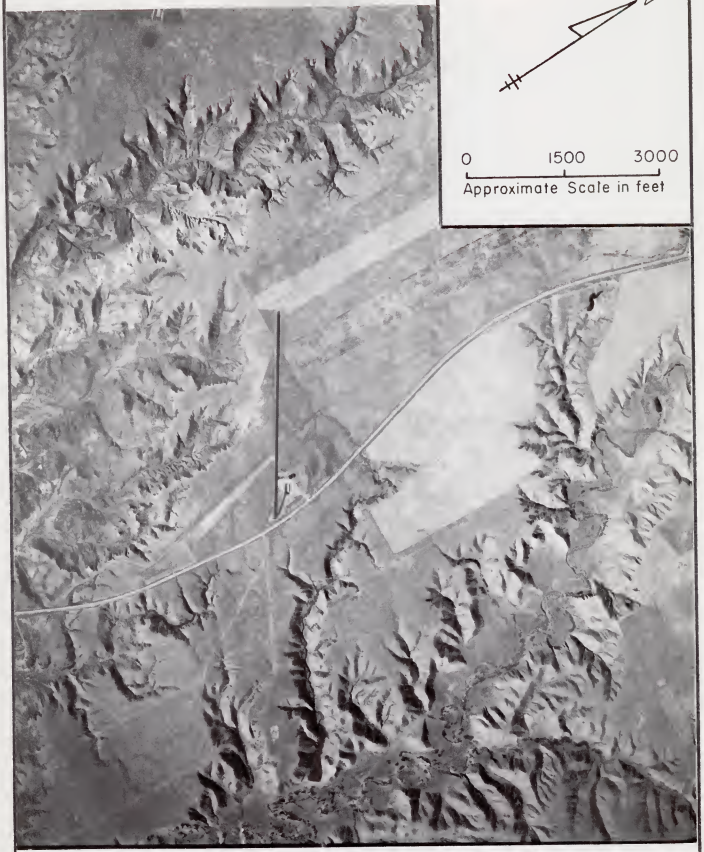
AIRCRAFT MIX AND CAPACITY FORECASTS

	1972	1977	1982	1987	1992
AIRCRAFT TYPE *A*	0	0	0	0	0
AIRCRAFT TYPE *B*	0	0	0	0	0
AIRCRAFT TYPE *C*	0	0	2	4	8
AIRCRAFT TYPE *D+E*	100	100	98	96	94
HOURLY CAPACITY VFR	77	88	99	99	99
HOURLY CAPACITY IFR	0	0	0	0	0
ANNUAL CAPACITY(000)	107	122	138	138	138

DEVELOPMENT COST SUMMARY

PLAN PERIOD	PARTICIPATION	LAND SIDE	AIR SIDE	TOTAL
BEFORE 1977	FEDERAL	$	$ 25,000	$ 25,000
	STATE/LOCAL		6,000	6,000
	TOTAL		31,000	31,000
1977	FEDERAL	5,000	6,000	11,000
	STATE/LOCAL	23,000	2,000	25,000
	TOTAL	28,000	8,000	36,000
1982	FEDERAL	1,000		1,000
	STATE/LOCAL	2,000		2,000
	TOTAL	3,000		3,000
1987	FEDERAL	1,000		1,000
	STATE/LOCAL	2,000		2,000
	TOTAL	3,000		3,000
1992	FEDERAL	2,000	39,000	41,000
	STATE/LOCAL	4,000	10,000	14,000
	TOTAL	6,000	49,000	55,000
TOTAL COSTS TO 1992	FEDERAL	9,000	70,000	79,000
	STATE/LOCAL	31,000	18,000	49,000
	TOTAL	40,000	88,000	128,000

HARLEM



MSASP AIRFIELD DEVELOPMENT COSTS IN THOUSANDS OF 1972 DOLLARS

HARLEM

	FED SHARE	TOTAL	FED GRANTS	STATE/LOCAL
BEFORE 1977				
1 PROPERTY FOR CLEARANCE	79.46	1.00	0.79	0.20
2 WIDEN LANDING STRIP	79.46	30.00	23.83	6.16
TOTAL ($000)		31.01	24.64	6.37
1977				
3 NAVAIDS				
A NDB	79.46	8.00	6.35	1.64
TOTAL ($000)		8.00	6.36	1.64
1992				
4 OVERLAY RUNWAY(10/28)	79.46	48.60	38.61	9.98
TOTAL ($000)		48.60	38.62	9.98
TOTAL PROJECT COSTS		87.61	69.62	18.01

AIRSIDE

FEDERAL SHARE OF THE PROJECT COSTS

	FED SHARE	1977	1982	1987	1992
1 GA TERMINAL BUILDING AREA(SF)	0.00	0.	0.	0.	0.
2 GA AIRCRAFT LOADING POSITIONS(NUMBER)	0.00	0.	0.	0.	0.
3 GA AC LOADING & BYPASS APRON AREA(SY)	79.46	0.	0.	0.	0.
4 ITINERANT AIRCRAFT PARKING AREA(SY)	79.46	0.	0.	0.	1120.
5 GA BASED AIRCRAFT TIE-DOWN AREA(SY)	79.46	3757.	417.	417.	417.
6 GA CONV HANGAR BLDG AND APRON AREA(SY)	79.46	0.	0.	0.	0.
7 GA *T* HANGAR BLDG & APRON AREA(SY)	79.46	778.	322.	322.	322.
8 GA PUBLIC VEHICULAR PARKING SPACE(NO.)	0.00	0.	0.	0.	0.
9 GA PUBLIC VEHICULAR PARKING AREA(SY)	0.00	0.	0.	0.	0.
10 AIRPORT MAINTENANCE APRON AREA(SY)	79.46	858.	47.	96.	96.
11 AIRPORT MAINTENANCE BUILDING(SF)	0.00	0.	0.	0.	0.
TOTAL IN THOUSANDS OF DOLLARS		5.4	0.8	0.8	2.0

LANDSIDE

PROJECT COST LESS FEDERAL GRANTS

	FED SHARE	1977	1982	1987	1992
1 GA TERMINAL BUILDING AREA(SF)	0.00	11530.	810.	810.	1620.
2 GA AIRCRAFT LOADING POSITIONS(NUMBER)	0.00	0.	0.	0.	0.
3 GA AC LOADING & BYPASS APRON AREA(SY)	79.46	0.	0.	0.	0.
4 ITINERANT AIRCRAFT PARKING AREA(SY)	79.46	0.	0.	0.	289.
5 GA BASED AIRCRAFT TIE-DOWN AREA(SY)	79.46	971.	107.	107.	107.
6 GA CONV HANGAR BLDG AND APRON AREA(SY)	79.46	0.	0.	0.	0.
7 GA *T* HANGAR BLDG & APRON AREA(SY)	79.46	691.	286.	286.	286.
8 GA PUBLIC VEHICULAR PARKING SPACE(NO.)	0.00	0.	0.	0.	0.
9 GA PUBLIC VEHICULAR PARKING AREA(SY)	0.00	8830.	748.	748.	1497.
10 AIRPORT MAINTENANCE APRON AREA(SY)	79.46	221.	12.	24.	24.
11 AIRPORT MAINTENANCE BUILDING(SF)	0.00	300.	17.	33.	34.
TOTAL IN THOUSANDS OF DOLLARS		22.5	2.0	2.0	3.9

HARLOWTON

Harlowton is located in the wheat-growing area of south central Montana. It is 20 miles south of the Little Belt Mountains and is served by U.S. Routes 12 and 191.

The airport is one mile northwest of town. Only type 'D & E' aircraft are expected until 1987, when small type 'C' aircraft activity will occur. Since vigerous growth of aviation activity is projected this airport should be part of the federal NASP.

Facility Requirements

A small amount of land side addition is needed in 1977. Air side expansion will consist of a runway extension and a MIRL system before 1977.

NAVAIDS: An NDB is recommended for installation by 1987 in order to accommodate the IFR traffic demand.

Name: HARLOWTON

Site Number:. 12393

County:. WHEATLAND

District:. 6

PEAK HOUR IFR AND VFR DEMAND FORECASTS

	1977	1982	1987	1992
HARLOWTON, MONTANA				
TOTAL PEAK HOUR VFR DEMAND	10.	10.	10.	10.
GA IFR PEAK HOUR DEMAND	1.	1.	1.	1.

OPERATIONAL DATA

DEMAND FORECAST INDICATORS

	1977	1982	1987	1992
1 TOTAL GA ANNUAL OPERATIONS	2330.0	2670.0	3330.0	4000.0
2 GA PEAK HOUR OPERATIONS	10.0	10.0	10.0	10.0
3 PERCENT GA ITINERANT OPERATIONS	30.0	30.0	30.0	30.0
4 BASED AIRCRAFT UNDER 12500 LBS	4.0	5.0	6.0	7.0
5 BASED AIRCRAFT OVER 12500 LBS	0.0	0.0	0.0	0.0

AIRCRAFT MIX AND CAPACITY FORECASTS

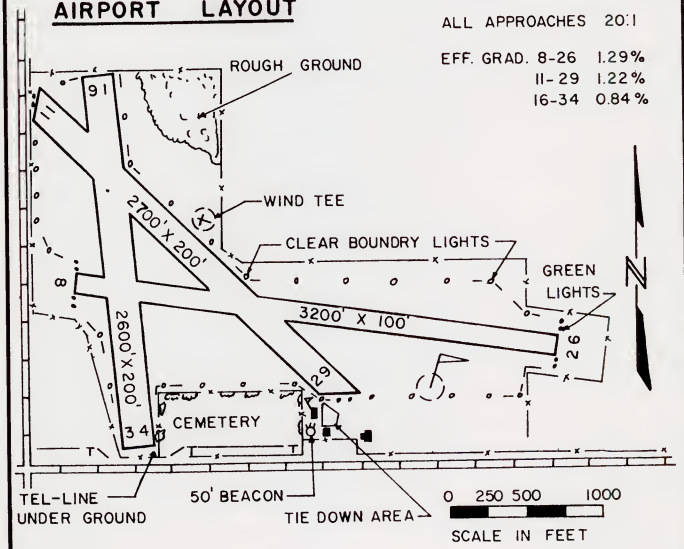
	1972	1977	1982	1987	1992
AIRCRAFT TYPE *A*	0	0	0	0	0
AIRCRAFT TYPE *B*	0	0	0	0	0
AIRCRAFT TYPE *C*	0	0	0	1	1
AIRCRAFT TYPE *D+E*	100	100	100	99	99
HOURLY CAPACITY VFR	80	88	99	99	99
HOURLY CAPACITY IFR	0	0	0	0	0
ANNUAL CAPACITY(000)	111	122	138	138	138

DEVELOPMENT COST SUMMARY

PLAN PERIOD	PARTICIPATION	LAND SIDE	AIR SIDE	TOTAL
BEFORE 1977	FEDERAL	$	$ 39,000	$ 39,000
	STATE/LOCAL		10,000	10,000
	TOTAL		49,000	49,000
1977	FEDERAL	3,000		3,000
	STATE/LOCAL	7,000		7,000
	TOTAL	10,000		10,000
1982	FEDERAL	1,000		1,000
	STATE/LOCAL			
	TOTAL	1,000		1,000
1987	FEDERAL	1,000		1,000
	STATE/LOCAL			
	TOTAL	1,000		1,000
1992	FEDERAL	1,000		1,000
	STATE/LOCAL			
	TOTAL	1,000		1,000
TOTAL COSTS TO 1992	FEDERAL	6,000	39,000	45,000
	STATE/LOCAL	7,000	10,000	17,000
	TOTAL	13,000	49,000	62,000

HARLOWTON

AIRPORT LAYOUT



MSASP AIRFIELD DEVELOPMENT COSTS IN THOUSANDS OF 1972 DOLLARS

HARLOWTON

AIRSIDE

	FED SHARE	TOTAL	FED GRANTS	STATE/LOCAL
BEFORE 1977				
1 EXTEND RUNWAY(8/26)				
A EARTHWORK	79.46	5.55	4.41	1.13
B LAND ACQUISITION	79.46	3.12	2.47	0.64
C EASEMENTS	79.46	0.80	0.63	0.16
D SITE PREP.	79.46	2.40	1.90	0.49
E OBSTRUCTION REMOVAL	79.46	0.70	0.55	0.14
2 LANDING AIDS				
A MIRL	79.46	28.75	22.84	5.90
3 NAVAIDS				
A NDB	79.46	8.00	6.35	1.64
TOTAL ($000)		49.35	39.22	10.16
TOTAL PROJECT COSTS		49.35	39.22	10.16

LANDSIDE

FEDERAL SHARE OF THE PROJECT COSTS

	FED SHARE	1977	1982	1987	1992
1 GA TERMINAL BUILDING AREA(SF)	0.00	0.	0.	0.	0.
2 GA AIRCRAFT LOADING POSITIONS(NUMBER)	0.00	0.	0.	0.	0.
3 GA AC LOADING & BYPASS APRON AREA(SY)	79.46	810.	0.	0.	0.
4 ITINERANT AIRCRAFT PARKING AREA(SY)	79.46	0.	0.	0.	0.
5 GA BASED AIRCRAFT TIE-DOWN AREA(SY)	79.46	1671.	417.	417.	417.
6 GA CONV HANGAR BLDG AND APRON AREA(SY)	79.46	0.	0.	0.	0.
7 GA *T* HANGAR BLDG & APRON AREA(SY)	0.00	0.	0.	0.	0.
8 GA PUBLIC VEHICULAR PARKING SPACE(NO.)	0.00	0.	0.	0.	0.
9 GA PUBLIC VEHICULAR PARKING AREA(SY)	79.46	333.	69.	96.	96.
10 AIRPORT MAINTENANCE APRON AREA(SY)	0.00	0.	0.	0.	0.
11 AIRPORT MAINTENANCE BUILDING(SF)		2.8	0.5	0.5	0.5
TOTAL IN THOUSANDS OF DOLLARS					

PROJECT COST LESS FEDERAL GRANTS

	FED SHARE	1977	1982	1987	1992
1 GA TERMINAL BUILDING AREA(SF)	0.00	0.	0.	0.	0.
2 GA AIRCRAFT LOADING POSITIONS(NUMBER)	0.00	0.	0.	0.	0.
3 GA AC LOADING & BYPASS APRON AREA(SY)	79.46	209.	0.	0.	0.
4 ITINERANT AIRCRAFT PARKING AREA(SY)	79.46	0.	0.	0.	0.
5 GA BASED AIRCRAFT TIE-DOWN AREA(SY)	79.46	432.	107.	107.	107.
6 GA CONV HANGAR BLDG AND APRON AREA(SY)	79.46	0.	0.	0.	0.
7 GA *T* HANGAR BLDG & APRON AREA(SY)	79.46	0.	0.	0.	0.
8 GA PUBLIC VEHICULAR PARKING SPACE(NO.)	0.00	0.	0.	0.	0.
9 GA PUBLIC VEHICULAR PARKING AREA(SY)	0.00	613.	0.	0.	0.
10 AIRPORT MAINTENANCE APRON AREA(SY)	79.46	86.	12.	24.	24.
11 AIRPORT MAINTENANCE BUILDING(SF)	0.00	117.	17.	33.	33.
TOTAL IN THOUSANDS OF DOLLARS		7.0	0.1	0.2	0.2

HOT SPRINGS

The town of Hot Springs is situated inside the Flathead Indian Reservation in northwest Montana. State Route 28 passes two miles to the east of town.

The airport is located 2.5 miles east of town. Only Category 'D & E' aircraft is forecasted.

Facility Requirements

Some land side expansion is necessary in 1977. A runway extension before 1977 is needed.

Name: HOT SPRINGS

Site Number:. 12403.5

County:. SANDERS

District:. 11

PEAK HOUR IFR AND VFR DEMAND FORECASTS

	1977	1982	1987	1992
HOT SPRINGS				
TOTAL PEAK HOUR VFR DEMAND	10.	10.	10.	10.
GA IFR PEAK HOUR DEMAND	1.	1.	1.	1.

OPERATIONAL DATA

DEMAND FORECAST INDICATORS	1977	1982	1987	1992
1 TOTAL GA ANNUAL OPERATIONS	2330.0	2670.0	3330.0	4000.0
2 GA PEAK HOUR OPERATIONS	10.0	10.0	10.0	10.0
3 PERCENT GA ITINERANT OPERATIONS	30.0	30.0	30.0	30.0
4 BASED AIRCRAFT UNDER 12500 LBS	3.0	4.0	5.0	6.0
5 BASED AIRCRAFT OVER 12500 LBS	0.0	0.0	0.0	0.0

AIRCRAFT MIX AND CAPACITY FORECASTS

	1972	1977	1982	1987	1992
AIRCRAFT TYPE *A*	0	0	0	0	0
AIRCRAFT TYPE *B*	0	0	0	0	0
AIRCRAFT TYPE *C*	0	0	0	0	0
AIRCRAFT TYPE *D+E*	100	100	100	100	100
HOURLY CAPACITY VFR	77	88	99	99	99
HOURLY CAPACITY IFR	0	0	0	0	0
ANNUAL CAPACITY(000)	107	122	138	138	138

DEVELOPMENT COST SUMMARY

PLAN PERIOD	PARTICIPATION	LAND SIDE	AIR SIDE	TOTAL
BEFORE 1977	FEDERAL	$	$	$
	STATE/LOCAL		13,000	13,000
	TOTAL		13,000	13,000
1977	FEDERAL			
	STATE/LOCAL	12,000		12,000
	TOTAL	12,000		12,000
1982	FEDERAL			
	STATE/LOCAL	1,000		1,000
	TOTAL	1,000		1,000
1987	FEDERAL	1,000		1,000
	STATE/LOCAL	1,000		1,000
	TOTAL	2,000		2,000
1992	FEDERAL	1,000		1,000
	STATE/LOCAL	1,000		1,000
	TOTAL	2,000		2,000
TOTAL COSTS TO 1992	FEDERAL	2,000		2,000
	STATE/LOCAL	15,000	13,000	28,000
	TOTAL	17,000	13,000	30,000

HOT SPRINGS

MSASP AIRFIELD DEVELOPMENT COSTS IN THOUSANDS OF 1972 DOLLARS

HOT SPRINGS

SIDE A

	FED SHARE	TOTAL	FED GRANTS	STATE/LOCAL
BEFORE 1977				
1 EXTEND RUNWAY(6/24)				
A EARTHWORK	0.00	4.80	0.00	4.80
B LAND ACQUISITION	0.00	2.49	0.00	2.49
C EASEMENTS	0.00	0.80	0.00	0.80
D SITE PREP	0.00	2.40	0.00	2.40
E OBSTRUCTION REMOVAL	0.00	0.10	0.00	0.10
F DRAINAGE	0.00	2.40	0.00	2.40
TOTAL ($000)		13.01	0.02	12.01
TOTAL PROJECT COSTS		13.01	0.02	13.01

LANDSIDE

FEDERAL SHARE OF THE PROJECT COSTS

	FED SHARE	1977	1982	1987	1992
1 GA TERMINAL BUILDING AREA(SF)	0.00	0.	0.	0.	0.
2 GA AIRCRAFT LOADING POSITIONS(NUMBER)	0.00	0.	0.	0.	0.
3 GA AC LOADING & BYPASS APRON AREA(SY)	79.46	0.	0.	0.	0.
4 ITINERANT AIRCRAFT PARKING AREA(SY)	79.46	0.	0.	417.	417.
5 GA BASED AIRCRAFT TIE-DOWN AREA(SY)	79.46	0.	0.	0.	0.
6 GA CONV HANGAR BLDG AND APRON AREA(SY)	79.46	0.	0.	161.	161.
7 GA *T* HANGAR BLDG & APRON AREA(SY)	79.46	0.	0.	0.	0.
8 GA PUBLIC VEHICULAR PARKING SPACE(NO.)	0.00	0.	0.	0.	0.
9 GA PUBLIC VEHICULAR PARKING AREA(SY)	79.46	0.	0.	94.	98.
10 AIRPORT MAINTENANCE APRON AREA(SY)	0.00	0.	0.	0.	0.
11 AIRPORT MAINTENANCE BUILDING(SF)	0.00	0.	0.	0.7	0.7
TOTAL IN THOUSANDS OF DOLLARS		0.0	0.0	0.7	0.7

PROJECT COST LESS FEDERAL GRANTS

	FED SHARE	1977	1982	1987	1992
1 GA TERMINAL BUILDING AREA(SF)	0.00	0.	0.	0.	0.
2 GA AIRCRAFT LOADING POSITIONS(NUMBER)	0.00	0.	0.	0.	0.
3 GA AC LOADING & BYPASS APRON AREA(SY)	79.46	1020.	0.	0.	0.
4 ITINERANT AIRCRAFT PARKING AREA(SY)	79.46	0.	0.	107.	107.
5 GA BASED AIRCRAFT TIE-DOWN AREA(SY)	79.46	798.	525.	0.	0.
6 GA CONV HANGAR BLDG AND APRON AREA(SY)	79.46	0.	0.	447.	447.
7 GA *T* HANGAR BLDG & APRON AREA(SY)	79.46	1823.	608.	0.	0.
8 GA PUBLIC VEHICULAR PARKING SPACE(NO.)	0.00	0.	0.	0.	0.
9 GA PUBLIC VEHICULAR PARKING AREA(SY)	0.00	7484.	0.	0.	0.
10 AIRPORT MAINTENANCE APRON AREA(SY)	79.46	419.	61.	24.	24.
11 AIRPORT MAINTENANCE BUILDING(SF)	0.00	117.	17.	33.	33.
TOTAL IN THOUSANDS OF DOLLARS		11.7	1.2	0.6	0.6

HYSHAM

The town of Hysham is located in southeastern Montana just south of the Yellowstone River. Hysham is served by U. S. 10 and Interstate Route 94, which passes three miles south of town. Billings is 77 miles to the southwest and Miles City is 71 miles to the east.

The airport is one and a half miles east of town on U. S. 10. 'D & E' type aircraft is predicted.

Facility Requirements

Only minimal land side addition is needed. A small amount of runway extension is needed before 1977.

Name: HYSHAM

Site Number: 12404.1

County: TREASURE

District: 3

PEAK HOUR IFR AND VFR DEMAND FORECASTS

	1977	1982	1987	1992
HYSHAM, MONTANA				
TOTAL PEAK HOUR VFR DEMAND	2.	3.	3.	4.
GA IFR PEAK HOUR DEMAND	0.	0.	0.	0.

OPERATIONAL DATA

DEMAND FORECAST INDICATORS

	1977	1982	1987	1992
1 TOTAL GA ANNUAL OPERATIONS	900.0	1100.0	1300.0	1500.0
2 GA PEAK HOUR OPERATIONS	2.0	3.0	3.0	4.0
3 PERCENT GA ITINERANT OPERATIONS	100.0	95.0	90.0	85.0
4 BASED AIRCRAFT UNDER 12500 LBS	0.0	1.0	1.0	2.0
5 BASED AIRCRAFT OVER 12500 LBS	0.0	0.0	0.0	0.0

AIRCRAFT MIX AND CAPACITY FORECASTS

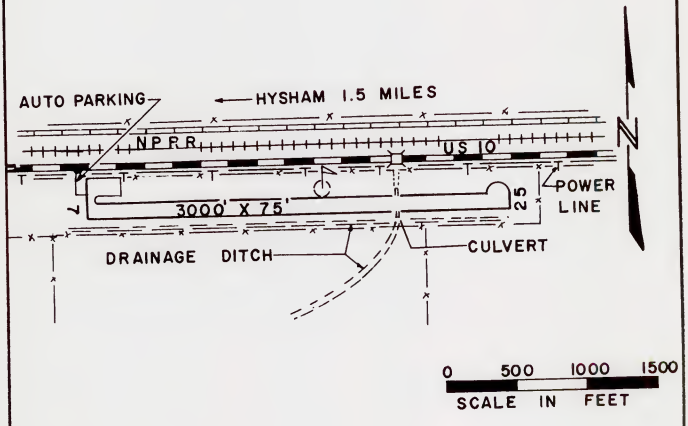
	1972	1977	1982	1987	1992
AIRCRAFT TYPE *A*	0	0	0	0	0
AIRCRAFT TYPE *B*	0	0	0	0	0
AIRCRAFT TYPE *C*	0	0	0	0	0
AIRCRAFT TYPE *D+E*	100	100	100	100	100
HOURLY CAPACITY VFR	77	88	99	99	99
HOURLY CAPACITY IFR	0	0	0	0	0
ANNUAL CAPACITY(000)	107	122	138	138	138

DEVELOPMENT COST SUMMARY

PLAN PERIOD	PARTICIPATION	LAND SIDE	AIR SIDE	TOTAL
BEFORE 1977	FEDERAL			
	STATE/LOCAL	$	$ 7,000	$ 7,000
	TOTAL		7,000	7,000
1977	FEDERAL			
	STATE/LOCAL	2,000		2,000
	TOTAL	2,000		2,000
1982	FEDERAL			
	STATE/LOCAL	2,000		2,000
	TOTAL	2,000		2,000
1987	FEDERAL			
	STATE/LOCAL			
	TOTAL			
1992	FEDERAL			
	STATE/LOCAL	2,000		2,000
	TOTAL	2,000		2,000
TOTAL COSTS TO 1992	FEDERAL			
	STATE/LOCAL	6,000	7,000	13,000
	TOTAL	6,000	7,000	13,000

HYSHAM

AIRPORT LAYOUT



MSASP AIRFIELD DEVELOPMENT COSTS IN THOUSANDS OF 1972 DOLLARS

HYSHAM

AIRSIDE

	FED SHARE	TOTAL	FED GRANTS	STATE/LOCAL
BEFORE 1977				
1 EXTEND RUNWAY(7/25)				
A EARTHWORK	0.00	4.50	0.00)	4.50
B SITE PREP	0.00	2.40	0.00	2.40
TOTAL ($000)		6.90	0.01	6.90
TOTAL PROJECT COSTS		6.98	0.01	6.90

LANDSIDE

FEDERAL SHARE OF THE PROJECT COSTS

	FED SHARE	1977	1982	1987	1992
1 GA TERMINAL BUILDING AREA(SF)	0.00	0.	0.	0.	0.
2 GA AIRCRAFT LOADING POSITIONS(NUMBER)	0.00	0.	0.	0.	0.
3 GA AC LOADING & BYPASS APRON AREA(SY)	0.00	0.	0.	0.	0.
4 ITINERANT AIRCRAFT PARKING AREA(SY)	0.00	0.	0.	0.	0.
5 GA BASED AIRCRAFT TIE-DOWN AREA(SY)	0.00	0.	0.	0.	0.
6 GA CONV HANGAR BLDG AND APRON AREA(SY)	0.00	0.	0.	0.	0.
7 GA *T* HANGAR BLDG & APRON AREA(SY)	0.00	0.	0.	0.	0.
8 GA PUBLIC VEHICULAR PARKING SPACE(NO.)	0.00	0.	0.	0.	0.
9 GA PUBLIC VEHICULAR PARKING AREA(SY)	0.00	0.	0.	0.	0.
10 AIRPORT MAINTENANCE APRON AREA(SY)	0.00	0.	0.	0.	0.
11 AIRPORT MAINTENANCE BUILDING(SF)	0.00	0.	0.	0.	0.
TOTAL IN THOUSANDS OF DOLLARS		0.0	0.0	0.0	0.0

PROJECT COST LESS FEDERAL GRANTS

	FED SHARE	1977	1982	1987	1992
1 GA TERMINAL BUILDING AREA(SF)	0.00	0.	0.	0.	0.
2 GA AIRCRAFT LOADING POSITIONS(NUMBER)	0.00	0.	0.	0.	0.
3 GA AC LOADING & BYPASS APRON AREA(SY)	0.00	1020.	0.	0.	1020.
4 ITINERANT AIRCRAFT PARKING AREA(SY)	0.00	0.	0.	0.	0.
5 GA BASED AIRCRAFT TIE-DOWN AREA(SY)	0.00	3.	525.	0.	525.
6 GA CONV HANGAR BLDG AND APRON AREA(SY)	0.00	0.	408.	0.	408.
7 GA *T* HANGAR BLDG & APRON AREA(SY)	0.00	0.	0.	0.	0.
8 GA PUBLIC VEHICULAR PARKING SPACE(NO.)	0.00	0.	0.	0.	0.
9 GA PUBLIC VEHICULAR PARKING AREA(SY)	0.00	417.	748.	0.	748.
10 AIRPORT MAINTENANCE APRON AREA(SY)	0.00	162.	36.	36.	36.
11 AIRPORT MAINTENANCE BUILDING(SF)	0.00	45.	10.	10.	10.
TOTAL IN THOUSANDS OF DOLLARS		1.7	1.7	0.1	2.8

JORDAN

The town is on State Route 200 just south of the Piney Buttes and the Fort Peck Lake. Miles City is 86 miles southeast on State Route 22.

The airport is located two miles northwest of town. Aircraft type 'D & E' will use this facility.

Facility Requirements

A moderate amount of terminal building area is needed in 1987. The air side expansion will be a runway extension before 1977.

Name: JORDAN

Site Number: 12408

County: GARFIELD

District: 2

PEAK HOUR IFR AND VFR DEMAND FORECASTS

	1977	1982	1987	1992
JORDAN MONTANA				
TOTAL PEAK HOUR VFR DEMAND	9.	11.	14.	17.
GA IFR PEAK HOUR DEMAND	0.	1.	1.	2.

OPERATIONAL DATA

DEMAND FORECAST INDICATORS

	1977	1982	1987	1992
1 TOTAL GA ANNUAL OPERATIONS	4000.0	5000.0	6330.0	7660.0
2 GA PEAK HOUR OPERATIONS	9.0	11.0	14.0	17.0
3 PERCENT GA ITINERANT OPERATIONS	30.0	30.0	30.0	30.0
4 BASED AIRCRAFT UNDER 12500 LBS	6.0	7.0	9.0	11.0
5 BASED AIRCRAFT OVER 12500 LBS	0.0	0.0	0.0	0.0

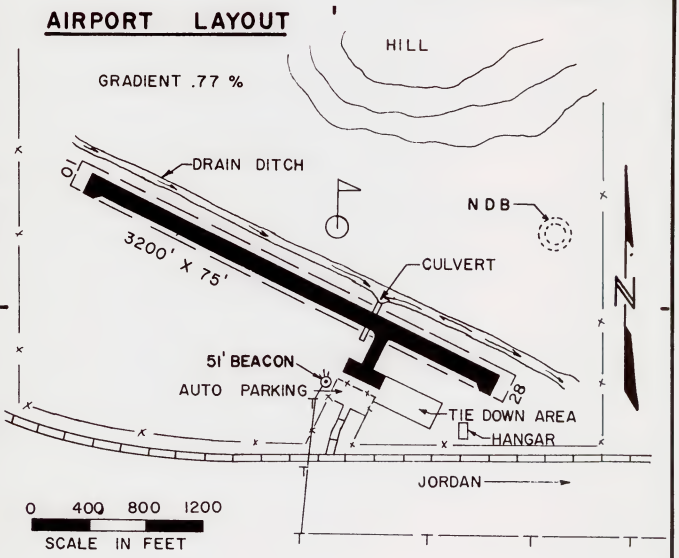
AIRCRAFT MIX AND CAPACITY FORECASTS

	1972	1977	1982	1987	1992
AIRCRAFT TYPE *A*	0	0	0	0	0
AIRCRAFT TYPE *B*	0	0	0	0	0
AIRCRAFT TYPE *C*	0	0	0	0	0
AIRCRAFT TYPE *D-E*	100	100	100	100	100
HOURLY CAPACITY VFR	77	88	99	99	99
HOURLY CAPACITY IFR	0	52	52	52	52
ANNUAL CAPACITY(000)	107	122	138	138	138

DEVELOPMENT COST SUMMARY

PLAN PERIOD	PARTICIPATION	LAND SIDE	AIR SIDE	TOTAL
BEFORE 1977	FEDERAL	$	$ 26,000	$ 26,000
	STATE/LOCAL		7,000	7,000
	TOTAL		33,000	33,000
1977	FEDERAL	4,000		4,000
	STATE/LOCAL	3,000		3,000
	TOTAL	7,000		7,000
1982	FEDERAL	1,000		1,000
	STATE/LOCAL			
	TOTAL	1,000		1,000
1987	FEDERAL	1,000		1,000
	STATE/LOCAL	15,000		15,000
	TOTAL	16,000		16,000
1992	FEDERAL	1,000		1,000
	STATE/LOCAL	6,000		6,000
	TOTAL	7,000		7,000
TOTAL COSTS TO 1992	FEDERAL	7,000	26,000	33,000
	STATE/LOCAL	24,000	7,000	31,000
	TOTAL	31,000	33,000	64,000

JORDAN


AIRPORT LAYOUT
HILL
GRADIENT .77 %
DRAIN DITCH
NDB
3200' X 75'
CULVERT
N
51' BEACON
AUTO PARKING
TIE DOWN AREA
HANGAR
JORDAN
0 400 800 1200
SCALE IN FEET

MSASP AIRFIELD DEVELOPMENT COSTS IN THOUSANDS OF 1972 DOLLARS

JORDAN

AIRSIDE

		FED SHARE	TOTAL	FED GRANTS	STATE/LOCAL
BEFORE 1977					
1	EXTEND RUNWAY(10/28)				
	A EARTHWORK	79.46	3.00	2.38	0.61
	B LAND ACQUISITION	79.46	4.05	3.21	0.83
	C EASEMENTS	79.46	1.00	0.79	0.20
	D SITE PREPARATION	79.46	2.40	1.90	0.49
	E PAVING	79.46	20.00	15.89	4.10
	F MIRL	79.46	2.10	1.66	0.43
	TOTAL ($000)		32.58	25.89	6.71
	TOTAL PROJECT COSTS		32.58	25.89	6.71

LANDSIDE

FEDERAL SHARE OF THE PROJECT COSTS

	FED SHARE	1977	1982	1987	1992
1 GA TERMINAL BUILDING AREA(SF)	0.00	0.	0.	0.	0.
2 GA AIRCRAFT LOADING POSITIONS(NUMBER)	0.00	0.	0.	0.	0.
3 GA AC LOADING & BYPASS APRON AREA(SY)	79.46	0.	0.	0.	0.
4 ITINERANT AIRCRAFT PARKING AREA(SY)	79.46	0.	0.	0.	0.
5 GA BASED AIRCRAFT TIE-DOWN AREA(SY)	79.46	2505.	417.	834.	834.
6 GA CONV HANGAR BLDG AND APRON AREA(SY)	79.46	972.	162.	324.	324.
7 GA *T* HANGAR BLDG & APRON AREA(SY)	79.46	0.	0.	0.	0.
8 GA PUBLIC VEHICULAR PARKING SPACE(NO.)	0.00	0.	0.	0.	0.
9 GA PUBLIC VEHICULAR PARKIMG AREA(SY)	0.00	0.	0.	0.	0.
10 AIRPORT MAINTENANCE APRON AREA(SY)	79.46	572.	143.	190.	190.
11 AIRPORT MAINTENANCE BUILDING(SF)	0.00	0.	0.	0.	0.
TOTAL IN THOUSANDS OF DOLLARS		4.1	0.7	1.4	1.4

PROJECT COST LESS FEDERAL GRANTS

	FED SHARE	1977	1982	1987	1992
1 GA TERMINAL BUILDING AREA(SF)	0.00	0.	0.	1234.	2430.
2 GA AIRCRAFT LOADING POSITIONS(NUMBER)	0.00	0.	0.	0.	0.
3 GA AC LOADING & BYPASS APRON AREA(SY)	79.46	0.	0.	0.	0.
4 ITINERANT AIRCRAFT PARKING AREA(SY)	79.46	0.	0.	0.	0.
5 GA BASED AIRCRAFT TIE-DOWN AREA(SY)	79.46	647.	107.	215.	215.
6 GA CONV HANGAR BLDG AND APRON AREA(SY)	79.46	1475.	246.	492.	492.
7 GA *T* HANGAR BLDG & APRON AREA(SY)	79.46	0.	0.	0.	0.
8 GA PUBLIC VEHICULAR PARKING SPACE(NO.)	0.00	0.	0.	0.	0.
9 GA PUBLIC VEHICULAR PARKING AREA(SY)	0.00	0.	0.	1478.	2245.
10 AIRPORT MAINTENANCE APRON AREA(SY)	79.46	147.	37.	49.	49.
11 AIRPORT MAINTENANCE BUILDING(SF)	0.00	200.	50.	67.	66.
TOTAL IN THOUSANDS OF DOLLARS		2.5	0.4	1.4.6	5.5

KALISPELL

The city of Kalispell is situated in the Rocky Mountains of northwest Montana. The Flathead National Forest surrounds Kalispell, and Flathead Lake is 10 miles south. U.S. 2 and U.S. 93 provide good access to and from the city.

The Kalispell City airport is just south of the city off U.S. 93. This is a very active general aviation airport, extremely convenient to the city it serves. However, the city is growing around it and there are numerous obstructions including floodlights on a football stadium just off the end of runway 13, and two radio towers off the end of runway 31. There is also a hill immediately west of the airport. The growing traffic will overtax the present facilities before 1987. Meanwhile, growing opposition to aircraft noise may limit operations. It is recommended that no further extensions be made to the landing area of this airport and that the excess VFR operations, and all IFR operations that cannot be accommodated here be transferred to the Kalispell (Glacier Park International) airport. This airport is not in the NASP because of the closeness of Glacier Park International.

Facility Requirements

Only landside expansions in 1977 and 1982 should be considered for this airport due to reasons stated sbove.

Name: KALISPELL CITY

Site Number:. 12417

County:. FLATHEAD

District:. 10

PEAK HOUR IFR AND VFR DEMAND FORECASTS

	1977	1982	1987	1992
KALISPELL(CITY),MONTANA				
TOTAL PEAK HOUR VFR DEMAND	42.	48.	54.	60.
GA IFR PEAK HOUR DEMAND	2.	3.	5.	7.

OPERATIONAL DATA

DEMAND FORECAST INDICATORS	1977	1982	1987	1992
1 TOTAL GA ANNUAL OPERATIONS	26000.0	29000.0	34000.0	39000.0
2 GA PEAK HOUR OPERATIONS	42.0	48.0	54.0	60.0
3 PERCENT GA ITINERANT OPERATIONS	30.0	30.0	30.0	30.0
4 BASED AIRCRAFT UNDER 12500 LBS	46.0	51.0	56.0	62.0
5 BASED AIRCRAFT OVER 12500 LBS	0.0	0.0	0.0	0.0

AIRCRAFT MIX AND CAPACITY FORECASTS

	1972	1977	1982	1987	1992
AIRCRAFT TYPE *A*	0	0	0	0	0
AIRCRAFT TYPE *B*	0	0	0	0	0
AIRCRAFT TYPE *C*	2	5	8	13	20
AIRCRAFT TYPE *D*E*	98	95	92	87	80
HOURLY CAPACITY VFR	83	91	99	99	99
HOURLY CAPACITY IFR	0	0	0	0	0
ANNUAL CAPACITY(000)	115	126	138	142	155

DEVELOPMENT COST SUMMARY

PLAN PERIOD	PARTICIPATION	LAND SIDE	AIR SIDE	TOTAL
BEFORE 1977	FEDERAL			
	STATE/LOCAL			
	TOTAL			
1977	FEDERAL	$	$	$
	STATE/LOCAL	74,000		74,000
	TOTAL	74,000		74,000
1982	FEDERAL			
	STATE/LOCAL	17,000		17,000
	TOTAL	17,000		17,000
1987	FEDERAL			
	STATE/LOCAL	19,000		19,000
	TOTAL	19,000		19,000
1992	FEDERAL			
	STATE/LOCAL	20,000		20,000
	TOTAL	20,000		20,000
TOTAL COSTS TO 1992	FEDERAL			
	STATE/LOCAL	130,000		130,000
	TOTAL	130,000		130,000

KALISPELL CITY
N
0
4000
8000
Approximate Scale in feet

KALISPELL CITY

NO AIRSIDE DEVELOPMENTS REQUIRED

LANDSIDE

FEDERAL SHARE OF THE PROJECT COSTS

	FED SHARE	1977	1982	1987	1992
1 GA TERMINAL BUILDING AREA(SF)	0.00	0.	0.	0.	0.
2 GA AIRCRAFT LOADING POSITIONS(NUMBER)	0.00	0.	0.	0.	0.
3 GA AC LOADING & BYPASS APRON AREA(SY)	0.00	0.	0.	0.	0.
4 ITINERANT AIRCRAFT PARKING AREA(SY)	0.00	0.	0.	0.	0.
5 GA BASED AIRCRAFT TIE-DOWN AREA(SY)	0.00	0.	0.	0.	0.
6 GA CONV HANGAR BLDG AND APRON AREA(SY)	0.00	0.	0.	0.	0.
7 GA *T* HANGAR BLDG & APRON AREA(SY)	0.00	0.	0.	0.	0.
8 GA PUBLIC VEHICULAR PARKING SPACE(NO.)	0.00	0.	0.	0.	0.
9 GA PUBLIC VEHICULAR PARKING AREA(SY)	0.00	0.	0.	0.	0.
10 AIRPORT MAINTENANCE APRON AREA(SY)	0.00	0.	0.	0.	0.
11 AIRPORT MAINTENANCE BUILDING(SF)	0.00	0.	0.	0.	0.
TOTAL IN THOUSANDS OF DOLLARS		0.0	0.0	0.0	0.0

PROJECT COST LESS FEDERAL GRANTS

	FED SHARE	1977	1982	1987	1992
1 GA TERMINAL BUILDING AREA(SF)	0.00	13580.	5940.	5940.	5940.
2 GA AIRCRAFT LOADING POSITIONS(NUMBER)	0.00	0.	0.	0.	0.
3 GA AC LOADING & BYPASS APRON AREA(SY)	0.00	0.	0.	0.	0.
4 ITINERANT AIRCRAFT PARKING AREA(SY)	0.00	0.	390.	1530.	1530.
5 GA BASED AIRCRAFT TIE-DOWN AREA(SY)	0.00	2553.	2625.	2625.	3150.
6 GA CONV HANGAR BLDG AND APRON AREA(SY)	0.00	0.	0.	0.	0.
7 GA *T* HANGAR BLDG & APRON AREA(SY)	0.00	27956.	3039.	3039.	3646.
8 GA PUBLIC VEHICULAR PARKING SPACE(NO.)	0.00	0.	0.	0.	0.
9 GA PUBLIC VEHICULAR PARKING AREA(SY)	0.00	26934.	4491.	4491.	4491.
10 AIRPORT MAINTENANCE APRON AREA(SY)	0.00	2700.	540.	900.	900.
11 AIRPORT MAINTENANCE BUILDING(SF)	0.00	0.	0.	0.	0.
TOTAL IN THOUSANDS OF DOLLARS		73.7	17.0	18.5	19.7

LAUREL

Laurel is in southern Montana 16 miles southwest of Billings off Interstate Route 94. The town is located one mile north of the interstate route.

The Laurel Municipal airport is one mile north of town. The existing air fleet are type 'D & E' aircraft. Type 'C' aircraft activity will begin in 1982.

Facility Requirements

A considerable landside expansion is projected herein for 1977. Air side addition will require a runway overlay in 1992. See the following pages for costs.

NAVAIDS: This airport is close enough to Billings to have an instrument procedure using either the Billings VOR or the proposed ASR. This should accommodate the IFR traffic demand forecast for this airport through 1992.

Name: LAUREL

Site Number: 12422

County: YELLOWSTONE

District: 7

PEAK HOUR IFR AND VFR DEMAND FORECASTS

	1977	1982	1987	1992
LAURFL MONTANA				
TOTAL PEAK HOUR VFR DEMAND	14.	17.	21.	26.
GA IFR PEAK HOUR DEMAND	1.	1.	2.	3.

OPERATIONAL DATA

DEMAND FORECAST INDICATORS

	1977	1982	1987	1992
1 TOTAL GA ANNUAL OPERATIONS	6220.0	8000.0	10440.0	13330.0
2 GA PEAK HOUR OPERATIONS	14.0	17.0	21.0	26.0
3 PERCENT GA ITINERANT OPERATIONS	45.0	45.0	45.0	45.0
4 BASED AIRCRAFT UNDER 12500 LBS	11.0	14.0	18.0	22.0
5 BASED AIRCRAFT OVER 12500 LBS	0.0	0.0	0.0	0.0

AIRCRAFT MIX AND CAPACITY FORECASTS

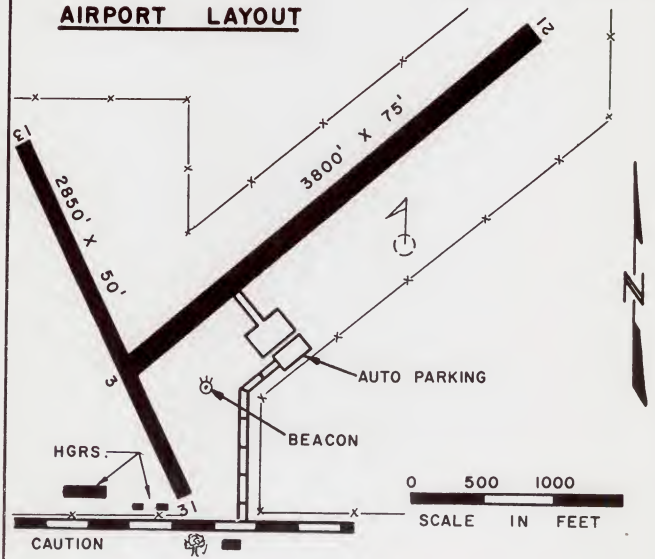
	1972	1977	1982	1987	1992
AIRCRAFT TYPE *A*	0	0	0	0	0
AIRCRAFT TYPE *B*	0	0	0	0	0
AIRCRAFT TYPE *C*	0	0	1	3	5
AIRCRAFT TYPE *D+E*	100	100	99	97	95
HOURLY CAPACITY VFR	77	88	99	99	99
HOURLY CAPACITY IFR	0	0	0	0	0
ANNUAL CAPACITY(000)	107	122	138	138	138

DEVELOPMENT COST SUMMARY

PLAN PERIOD	PARTICIPATION	LAND SIDE	AIR SIDE	TOTAL
BEFORE 1977	FEDERAL			
	STATE/LOCAL			
	TOTAL			
1977	FEDERAL	$ 4,000	$	$ 4,000
	STATE/LOCAL	23,000		23,000
	TOTAL	27,000		27,000
1982	FEDERAL	2,000		2,000
	STATE/LOCAL	5,000		5,000
	TOTAL	7,000		7,000
1987	FEDERAL	2,000		2,000
	STATE/LOCAL	7,000		7,000
	TOTAL	9,000		9,000
1992	FEDERAL	3,000	68,000	71,000
	STATE/LOCAL	9,000	18,000	27,000
	TOTAL	12,000	86,000	98,000
TOTAL COSTS TO 1992	FEDERAL	11,000	68,000	79,000
	STATE/LOCAL	44,000	18,000	62,000
	TOTAL	55,000	86,000	141,000

LAUREL

AIRPORT LAYOUT



MSASP AIRFIELD DEVELOPMENT COSTS IN THOUSANDS OF 1972 DOLLARS

LAUREL

AIRSIDE

	FED SHARE	TOTAL	FED GRANTS	STATE/LOCAL
1992				
1 OVERLAY RUNWAY (3-21)	79.46	85.50	67.94	17.56
TOTAL ($000)		85.50	67.94	17.56
TOTAL PROJECT COSTS		85.50	67.94	17.56

LANDSIDE

FEDERAL SHARE OF THE PROJECT COSTS

	FED SHARE	1977	1982	1987	1992
1 GA TERMINAL BUILDING AREA(SF)	0.00	0.	0.	0.	0.
2 GA AIRCRAFT LOADING POSITIONS(NUMBER)	0.00	0.	0.	0.	0.
3 GA AC LOADING & BYPASS APRON AREA(SY)	79.46	0.	0.	0.	0.
4 ITINERANT AIRCRAFT PARKING AREA(SY)	79.46	0.	0.	0.	906.
5 GA BASED AIRCRAFT TIE-DOWN AREA(SY)	79.46	3304.	1251.	1669.	1669.
6 GA CONV HANGAR BLDG AND APRON AREA(SY)	79.46	0.	0.	0.	0.
7 GA *T* HANGAR BLDG & APRON AREA(SY)	79.46	0.	0.	0.	0.
8 GA PUBLIC VEHICULAR PARKING SPACE(NO.)	0.00	0.	0.	0.	0.
9 GA PUBLIC VEHICULAR PARKING AREA(SY)	0.00	0.	0.	0.	0.
10 AIRPORT MAINTENANCE APRON AREA(SY)	79.46	890.	254.	349.	413.
11 AIRPORT MAINTENANCE BUILDING(SF)	0.00	0.	0.	0.	0.
TOTAL IN THOUSANDS OF DOLLARS		4.2	1.5	2.0	3.0

PROJECT COST LESS FEDERAL GRANTS

	FED SHARE	1977	1982	1987	1992
1 GA TERMINAL BUILDING AREA(SF)	0.00	12340.	2430.	3240.	4050.
2 GA AIRCRAFT LOADING POSITIONS(NUMBER)	0.00	0.	0.	0.	0.
3 GA AC LOADING & BYPASS APRON AREA(SY)	79.46	0.	0.	0.	0.
4 ITINERANT AIRCRAFT PARKING AREA(SY)	79.46	0.	0.	0.	234.
5 GA BASED AIRCRAFT TIE-DOWN AREA(SY)	79.46	854.	323.	431.	431.
6 GA CONV HANGAR BLDG AND APRON AREA(SY)	79.46	0.	0.	0.	0.
7 GA *T* HANGAR BLDG & APRON AREA(SY)	79.46	0.	0.	0.	0.
8 GA PUBLIC VEHICULAR PARKING SPACE(NO.)	0.00	0.	0.	0.	0.
9 GA PUBLIC VEHICULAR PARKING AREA(SY)	0.00	9578.	2245.	2994.	3742.
10 AIRPORT MAINTENANCE APRON AREA(SY)	79.46	230.	65.	90.	106.
11 AIRPORT MAINTENANCE BUILDING(SF)	0.00	311.	89.	122.	145.
TOTAL IN THOUSANDS OF DOLLARS		23.3	5.2	6.9	8.7

LAVINA

The town of Lavina is situated in the plains region of south central Montana on the Musselshell River. It is 47 miles north of Billings on State Route 3. Lavina is also served by U. S. 12, which lies one mile north.

The airport is one mile north of town off U. S. 12. Only 'D & E' type aircraft is expected.

Facility Requirements

A very slight landing strip extension and small landside items will be required around 1977.

Name: LAVINA

Site Number: 12423.1

County: GOLDEN VALLEY

District: 6

PEAK HOUR IFR AND VFR DEMAND FORECASTS

	1977	1982	1987	1992
LAVINA, MONTANA				
TOTAL PEAK HOUR VFR DEMAND	2.	2.	2.	2.
GA IFR PEAK HOUR DEMAND	0.	0.	0.	0.

OPERATIONAL DATA

DEMAND FORECAST INDICATORS

	1977	1982	1987	1992
1 TOTAL GA ANNUAL OPERATIONS	600.0	700.0	800.0	900.0
2 GA PEAK HOUR OPERATIONS	2.0	2.0	2.0	2.0
3 PERCENT GA ITINERANT OPERATIONS	75.0	65.0	56.0	50.0
4 BASED AIRCRAFT UNDER 12500 LBS	1.0	1.0	1.0	1.0
5 BASED AIRCRAFT OVER 12500 LBS	0.0	0.0	0.0	0.0

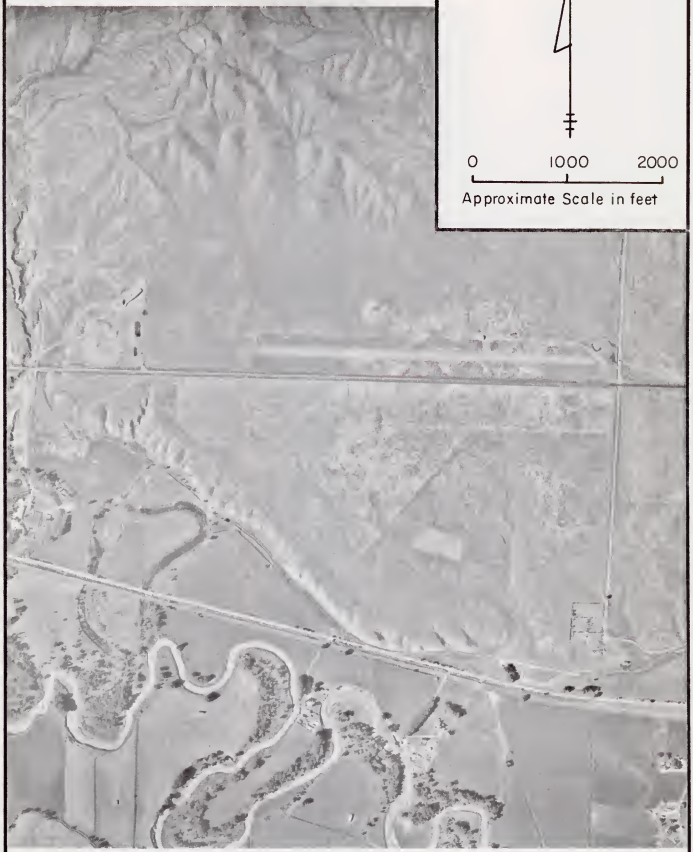
AIRCRAFT MIX AND CAPACITY FORECASTS

	1972	1977	1982	1987	1992
AIRCRAFT TYPE *A*	0	0	0	0	0
AIRCRAFT TYPE *B*	0	0	0	0	0
AIRCRAFT TYPE *C*	0	0	0	0	0
AIRCRAFT TYPE *D+E*	100	100	100	100	100
HOURLY CAPACITY VFR	77	88	99	99	99
HOURLY CAPACITY IFR	0	0	0	0	0
ANNUAL CAPACITY(000)	107	122	138	138	138

DEVELOPMENT COST SUMMARY

PLAN PERIOD	PARTICIPATION	LAND SIDE	AIR SIDE	TOTAL
BEFORE 1977	FEDERAL	$	$	$
	STATE/LOCAL		11,000	11,000
	TOTAL		11,000	11,000
1977	FEDERAL			
	STATE/LOCAL	5,000		5,000
	TOTAL	5,000		5,000
1982	FEDERAL			
	STATE/LOCAL			
	TOTAL			
1987	FEDERAL			
	STATE/LOCAL			
	TOTAL			
1992	FEDERAL			
	STATE/LOCAL			
	TOTAL			
TOTAL COSTS TO 1992	FEDERAL			
	STATE/LOCAL	5,000	11,000	16,000
	TOTAL	5,000	11,000	16,000

LAVINA



MSASP AIRFIELD DEVELOPMENT COSTS IN THOUSANDS OF 1972 DOLLARS

LAVINA

AIRSIDE

	FED SHARE	TOTAL	FED GRANTS	STATE/LOCAL
BEFORE 1977				
1 EXTEND LANDING STRIP				
A EARTHWORK	0.00	3.60	0.00	3.60
B SITE PREPARATION	0.00	2.40	0.00	2.40
C DRAINAGE	0.00	1.80	0.00	1.80
D LAND ACQUISITION	0.00	2.40	0.00	2.40
E EASEMENTS	0.00	0.80	0.00	0.80
F OBSTRUCTION REMOVAL	0.00	0.10	0.00	0.10
TOTAL ($000)		11.12	0.00	11.12
TOTAL PROJECT COSTS		11.12	0.00	11.12

LANDSIDE

FEDERAL SHARE OF THE PROJECT COSTS

	FED SHARE	1977	1982	1987	1992
1 GA TERMINAL BUILDING AREA(SF)	0.00	0.	0.	0.	0.
2 GA AIRCRAFT LOADING POSITIONS(NUMBER)	0.00	0.	0.	0.	0.
3 GA AC LOADING & BYPASS APRON AREA(SY)	0.00	0.	0.	0.	0.
4 ITINERANT AIRCRAFT PARKING AREA(SY)	0.00	0.	0.	0.	0.
5 GA BASED AIRCRAFT TIE-DOWN AREA(SY)	0.00	0.	0.	0.	0.
6 GA CONV HANGAR BLDG AND APRON AREA(SY)	0.00	0.	0.	0.	0.
7 GA *T* HANGAR BLDG & APRON AREA(SY)	0.00	0.	0.	0.	0.
8 GA PUBLIC VEHICULAR PARKING SPACE(NO.)	0.00	0.	0.	0.	0.
9 GA PUBLIC VEHICULAR PARKING AREA(SY)	0.00	0.	0.	0.	0.
10 AIRPORT MAINTENANCE APRON AREA(SY)	0.00	0.	0.	0.	0.
11 AIRPORT MAINTENANCE BUILDING(SF)	0.00	0.	0.	0.	0.
TOTAL IN THOUSANDS OF DOLLARS		0.0	0.0	0.0	0.0

PROJECT COST LESS FEDERAL GRANTS

	FED SHARE	1977	1982	1987	1992
1 GA TERMINAL BUILDING AREA(SF)	0.00	0.	0.	0.	0.
2 GA AIRCRAFT LOADING POSITIONS(NUMBER)	0.00	0.	0.	0.	0.
3 GA AC LOADING & BYPASS APRON AREA(SY)	0.00	1020.	0.	0.	0.
4 ITINERANT AIRCRAFT PARKING AREA(SY)	0.00	1530.	0.	0.	0.
5 GA BASED AIRCRAFT TIE-DOWN AREA(SY)	0.00	528.	0.	0.	0.
6 GA CONV HANGAR BLDG AND APRON AREA(SY)	0.00	408.	0.	0.	0.
7 GA *T* HANGAR BLDG & APRON AREA(SY)	0.00	0.	0.	0.	0.
8 GA PUBLIC VEHICULAR PARKING SPACE(NO.)	0.00	0.	0.	0.	0.
9 GA PUBLIC VEHICULAR PARKING AREA(SY)	0.00	1497.	0.	0.	0.
10 AIRPORT MAINTENANCE APRON AREA(SY)	0.00	108.	18.	18.	18.
11 AIRPORT MAINTENANCE BUILDING(SF)	0.00	30.	5.	5.	5.
TOTAL IN THOUSANDS OF DOLLARS		5.1	0.0	0.0	0.0

LIBBY

Libby is situated within the Kootinai National Forest in northwest Montana. U. S. 2 provides access to Idaho, 32 miles to the northwest, and Kalispell, which lies 89 miles to the east. State Route 37 gives access to the north through the Purcell Mountains. Amtrak provides daily passenger service to Libby between Whitefish and Sandpoint, Idaho.

The airport is located seven miles south of town, four miles off U. S. 2. The current aircraft type is 'D & E'; however, in 1977, 'C' type aircraft will occur and increase throughout the period.

Facility Requirements

Terminal building area, 'T' hanger building and apron area, and public vehicular parking area are large cost items for 1977 land side expansion. Air side addition consists of a runway overlay in 1982 and a runway extension in 1992.

NAVAIDS: An NDB should be installed before 1977 to accommodate the growing IFR traffic demand.

Name: LIBBY

Site Number: 12429.11

County: LINCOLN

District: 10

PEAK HOUR IFR AND VFR DEMAND FORECASTS

	1977	1982	1987	1992
LIBBY MONTANA				
TOTAL PEAK HOUR VFR DEMAND	25.	28.	31.	34.
GA IFR PEAK HOUR DEMAND	1.	2.	3.	4.

OPERATIONAL DATA

DEMAND FORECAST INDICATORS

	1977	1982	1987	1992
1 TOTAL GA ANNUAL OPERATIONS	13000.0	14330.0	16000.0	17670.0
2 GA PEAK HOUR OPERATIONS	25.0	28.0	31.0	34.0
3 PERCENT GA ITINERANT OPERATIONS	30.0	30.0	30.0	30.0
4 BASED AIRCRAFT UNDER 12500 LBS	18.0	20.0	22.0	24.0
5 BASED AIRCRAFT OVER 12500 LBS	0.0	0.0	0.0	1.0

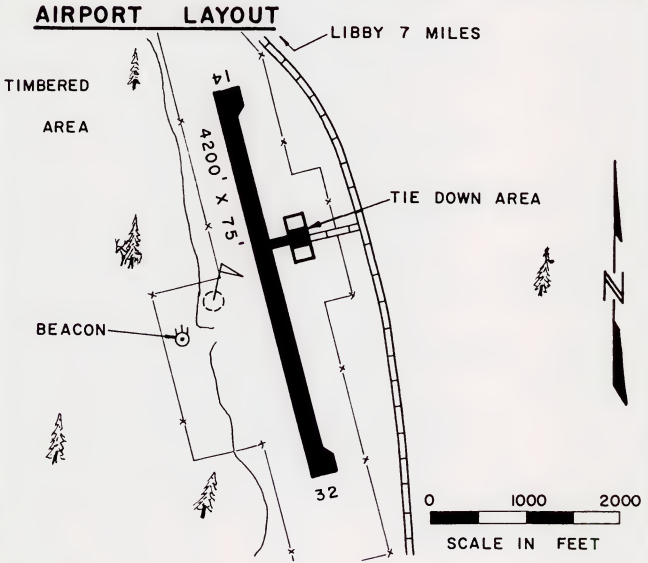
AIRCRAFT MIX AND CAPACITY FORECASTS

	1972	1977	1982	1987	1992
AIRCRAFT TYPE *A*	0	0	0	0	0
AIRCRAFT TYPE *B*	0	0	0	0	0
AIRCRAFT TYPE *C*	0	2	5	9	14
AIRCRAFT TYPE *D+E*	100	98	95	91	86
HOURLY CAPACITY VFR	77	88	99	99	99
HOURLY CAPACITY IFR	0	0	0	0	0
ANNUAL CAPACITY(000)	107	122	138	138	144

DEVELOPMENT COST SUMMARY

PLAN PERIOD	PARTICIPATION	LAND SIDE	AIR SIDE	TOTAL
BEFORE 1977	FEDERAL	$	$ 6,000	$ 6,000
	STATE/LOCAL		2,000	2,000
	TOTAL		8,000	8,000
1977	FEDERAL	14,000		14,000
	STATE/LOCAL	50,000		50,000
	TOTAL	64,000		64,000
1982	FEDERAL	1,000	75,000	76,000
	STATE/LOCAL	6,000	19,000	25,000
	TOTAL	7,000	94,000	101,000
1987	FEDERAL	3,000		3,000
	STATE/LOCAL	6,000		6,000
	TOTAL	9,000		9,000
1992	FEDERAL	4,000	25,000	29,000
	STATE/LOCAL	10,000	6,000	16,000
	TOTAL	14,000	31,000	45,000
TOTAL COSTS TO 1992	FEDERAL	22,000	106,000	128,000
	STATE/LOCAL	72,000	27,000	99,000
	TOTAL	94,000	133,000	227,000

LIBBY


AIRPORT LAYOUT
LIBBY 7 MILES
TIMBERED
AREA
4200' X 75'
14
32
TIE DOWN AREA
BEACON
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1000
2000
SCALE IN FEET

MSASP AIRFIELD DEVELOPMENT COSTS IN THOUSANDS OF 1972 DOLLARS

LIBBY

AIRSIDE

	FED SHARE	TOTAL	FED GRANTS	STATE/LOCAL
BEFORE 1977				
1 NDB	79.46	8.00	6.35	1.64
TOTAL ($000)		8.00	6.36	1.64
1982				
2 OVERLAY RUNWAY(14/32)	79.46	94.50	75.08	19.41
TOTAL ($000)		94.50	75.09	19.41
1992				
3 EXTEND RUNWAY(14/32)				
A EARTHWORK	79.46	1.95	1.54	0.40
B EASEMENTS	79.46	0.24	0.19	0.04
C DRAINAGE	79.46	2.40	1.90	0.49
D LIGHTING	79.46	3.15	2.50	0.64
E PAVING	79.46	23.15	18.39	4.75
TOTAL ($000)		30.91	24.57	6.36
TOTAL PROJECT COSTS		133.42	106.02	27.43

LANDSIDE

FEDERAL SHARE OF THE PROJECT COSTS

	FED SHARE	1977	1982	1987	1992
1 GA TERMINAL BUILDING AREA(SF)	0.00	0.	0.	0.	0.
2 GA AIRCRAFT LOADING POSITIONS(NUMBER)	0.00	0.	0.	0.	0.
3 GA AC LOADING & BYPASS APRON AREA(SY)	79.46	1478.	0.	810.	0.
4 ITINERANT AIRCRAFT PARKING AREA(SY)	79.46	1669.	0.	1216.	0.
5 GA BASED AIRCRAFT TIE-DOWN AREA(SY)	79.46	0.	0.	0.	837.
6 GA CONV HANGAR BLDG AND APRON AREA(SY)	79.46	2917.	324.	324.	2708.
7 GA *T* HANGAR BLDG & APRON AREA(SY)	79.46	5794.	644.	644.	644.
8 GA PUBLIC VEHICULAR PARKING SPACE(NO.)	0.00	0.	0.	0.	0.
9 GA PUBLIC VEHICULAR PARKIMG AREA(SY)	0.00	0.	0.	0.	0.
10 AIRPORT MAINTENANCE APRON AREA(SY)	79.46	1859.	190.	239.	239.
11 AIRPORT MAINTENANCE BUILDING(SF)	0.00	0.	0.	0.	0.
TOTAL IN THOUSANDS OF DOLLARS		13.7	1.2	3.2	4.4

PROJECT COST LESS FEDERAL GRANTS

	FED SHARE	1977	1982	1987	1992
1 GA TERMINAL BUILDING AREA(SF)	0.00	21250.	2430.	2430.	2430.
2 GA AIRCRAFT LOADING POSITIONS(NUMBER)	0.00	0.	0.	0.	0.
3 GA AC LOADING & BYPASS APRON AREA(SY)	79.46	382.	0.	209.	0.
4 ITINERANT AIRCRAFT PARKING AREA(SY)	79.46	431.	0.	314.	0.
5 GA BASED AIRCRAFT TIE-DOWN AREA(SY)	79.46	0.	0.	0.	216.
6 GA CONV HANGAR BLDG AND APRON AREA(SY)	79.46	4426.	492.	492.	4108.
7 GA *T* HANGAR BLDG & APRON AREA(SY)	79.46	5145.	571.	571.	571.
8 GA PUBLIC VEHICULAR PARKING SPACE(NO.)	0.00	0.	0.	0.	0.
9 GA PUBLIC VEHICULAR PARKIMG AREA(SY)	0.00	17361.	2245.	2245.	2245.
10 AIRPORT MAINTENANCE APRON AREA(SY)	79.46	480.	49.	61.	61.
11 AIRPORT MAINTENANCE BUILDING(SF)	0.00	650.	67.	83.	84.
TOTAL IN THOUSANDS OF DOLLARS		50.1	5.9	6.4	9.7

LINCOLN

The town is in western Montana within the Helena National Forest, 72 miles east of Missoula on state route 200. The Blackfoot River passes one mile south of Lincoln.

The airport is located one and a half miles east of town off state route 200. Only 'D & E' type aircraft are expected.

Facility Requirements

Moderate land side expansion is needed in each increment. A runway extension before 1977 and a MIRL system in 1977 comprise the air side additions.

NAVAIDS: An NDB should be installed before 1977 to accommodate the IFR traffic demand.

Name: LINCOLN

Site Number: 12430.1

County: LEWIS AND CLARK

District:. 8

PEAK HOUR IFR AND VFR DEMAND FORECASTS

	1977	1982	1987	1992
LINCOLN MONTANA				
TOTAL PEAK HOUR VFR DEMAND	7.	8.	9.	11.
GA IFR PEAK HOUR DEMAND	0.	1.	1.	1.

OPERATIONAL DATA

DEMAND FORECAST INDICATORS

	1977	1982	1987	1992
1 TOTAL GA ANNUAL OPERATIONS	3000.0	3330.0	4000.0	4770.0
2 GA PEAK HOUR OPERATIONS	7.0	8.0	9.0	11.0
3 PERCENT GA ITINERANT OPERATIONS	30.0	30.0	30.0	30.0
4 BASED AIRCRAFT UNDER 12500 LBS	5.0	6.0	7.0	8.0
5 BASED AIRCRAFT OVER 12500 LBS	0.0	0.0	0.0	0.0

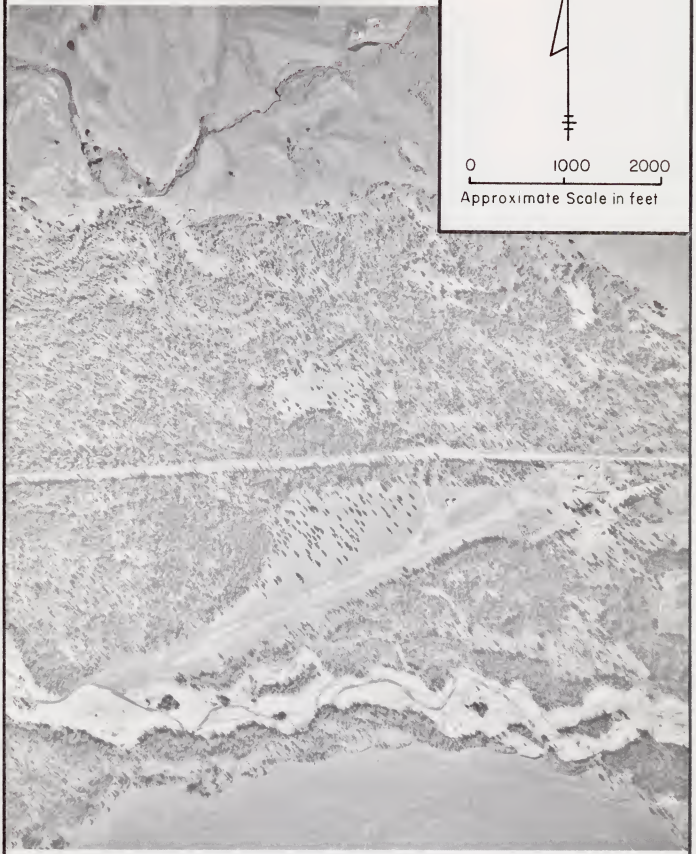
AIRCRAFT MIX AND CAPACITY FORECASTS

	1972	1977	1982	1987	1992
AIRCRAFT TYPE *A*	0	0	0	0	0
AIRCRAFT TYPE *B*	0	0	0	0	0
AIRCRAFT TYPE *C*	0	0	0	0	0
AIRCRAFT TYPE *D+E*	100	100	100	100	100
HOURLY CAPACITY VFR	77	88	99	99	99
HOURLY CAPACITY IFR	0	0	0	0	0
ANNUAL CAPACITY(000)	107	122	138	138	138

DEVELOPMENT COST SUMMARY

PLAN PERIOD	PARTICIPATION	LAND SIDE	AIR SIDE	TOTAL
BEFORE 1977	FEDERAL	$	$ 15,000	$ 15,000
	STATE/LOCAL		4,000	4,000
	TOTAL		19,000	19,000
1977	FEDERAL	4,000	29,000	33,000
	STATE/LOCAL	7,000	7,000	14,000
	TOTAL	11,000	36,000	47,000
1982	FEDERAL	1,000		1,000
	STATE/LOCAL	1,000		1,000
	TOTAL	2,000		2,000
1987	FEDERAL	1,000		1,000
	STATE/LOCAL	1,000		1,000
	TOTAL	2,000		2,000
1992	FEDERAL	1,000		1,000
	STATE/LOCAL	2,000		2,000
	TOTAL	3,000		3,000
TOTAL COSTS TO 1992	FEDERAL	7,000	44,000	51,000
	STATE/LOCAL	11,000	11,000	22,000
	TOTAL	18,000	55,000	73,000

LINCOLN



MSASP AIRFIELD DEVELOPMENT COSTS IN THOUSANDS OF 1972 DOLLARS

LINCOLN

AIRSIDE

	FED SHARE	TOTAL	FED GRANTS	STATE/LOCAL
BEFORE 1977				
1 EXTEND RUNWAY (4-22)				
A EARTHWORK	79.46	2.40	1.90	0.49
B SITE PREPARATION	79.46	1.20	0.95	0.24
C LAND ACQUISITION	79.46	1.50	1.19	0.30
D EASEMENTS	79.46	0.50	0.39	0.10
E DRAINAG	79.46	2.40	1.90	0.49
F PAVING	79.46	2.45	1.94	0.50
G OBSTRUCTION REMOVAL	79.46	0.20	0.15	0.04
2 NDB	79.46	8.00	6.35	1.64
TOTAL ($000)		18.68	14.85	3.87
1977				
3 MIRL	79.46	36.00	28.60	7.39
TOTAL ($000)		36.00	28.61	7.39
TOTAL PROJECT COSTS		54.69	43.46	11.27

LANDSIDE

FEDERAL SHARE OF THE PROJECT COSTS

	FED SHARE	1977	1982	1987	1992
1 GA TERMINAL BUILDING AREA(SF)	0.00	0.	0.	0.	0.
2 GA AIRCRAFT LOADING POSITIONS(NUMBER)	0.00	0.	0.	0.	0.
3 GA AC LOADING & BYPASS APRON AREA(SY)	79.46	0.	0.	0.	0.
4 ITINERANT AIRCRAFT PARKING AREA(SY)	79.46	0.	0.	0.	0.
5 GA BASED AIRCRAFT TIE-DOWN AREA(SY)	79.46	2088.	417.	417.	417.
6 GA CONV HANGAR BLDG AND APRON AREA(SY)	79.46	0.	0.	0.	0.
7 GA *T* HANGAR BLDG & APRON AREA(SY)	79.46	1609.	322.	322.	322.
8 GA PUBLIC VEHICULAR PARKING SPACE(NO.)	0.00	0.	0.	0.	0.
9 GA PUBLIC VEHICULAR PARKIMG AREA(SY)	0.00	0.	0.	0.	0.
10 AIRPORT MAINTENANCE APRON AREA(SY)	79.46	429.	47.	96.	110.
11 AIRPORT MAINTENANCE BUILDING(SF)	0.00	0.	0.	0.	0.
TOTAL IN THOUSANDS OF DOLLARS		4.1	0.8	0.8	0.9

PROJECT COST LESS FEDERAL GRANTS

	FED SHARE	1977	1982	1987	1992
1 GA TERMINAL BUILDING AREA(SF)	0.00	0.	0.	0.	0.
2 GA AIRCRAFT LOADING POSITIONS(NUMBER)	0.00	0.	0.	0.	0.
3 GA AC LOADING & BYPASS APRON AREA(SY)	79.46	0.	0.	0.	0.
4 ITINERANT AIRCRAFT PARKING AREA(SY)	79.46	0.	0.	0.	0.
5 GA BASED AIRCRAFT TIE-DOWN AREA(SY)	79.46	539.	107.	107.	107.
6 GA CONV HANGAR BLDG AND APRON AREA(SY)	79.46	0.	0.	0.	0.
7 GA *T* HANGAR BLDG & APRON AREA(SY)	79.46	1429.	286.	286.	286.
8 GA PUBLIC VEHICULAR PARKING SPACE(NO.)	0.00	0.	0.	0.	0.
9 GA PUBLIC VEHICULAR PARKIMG AREA(SY)	0.00	4339.	748.	748.	1497.
10 AIRPORT MAINTENANCE APRON AREA(SY)	79.46	111.	12.	24.	28.
11 AIRPORT MAINTENANCE BUILDING(SF)	0.00	150.	17.	33.	39.
TOTAL IN THOUSANDS OF DOLLARS		6.6	1.2	1.2	2.0

LIVINGSTON

The city is situated in southwest Montana along the Yellowstone River, north and east of the Gallatin National Forest. Livingston is on U.S. 10, one mile north of Interstate 90 and 26 miles east of Bozeman.

Mission field is located five miles northeast of town off Interstate 90. Beginning in 1977 'C' type aircraft activity is expected.

Facility Requirements

In 1977 based aircraft tie-down area and public vehicular parking area will need large additions. Air side expansion includes a runway overlay before 1977. (Runway lighting and VASI additions were completed in the year 1973.)

Name: LIVINGSTON

Site Number: 12433

County: PARK

District: 9

PEAK HOUR IFR AND VFR DEMAND FORECASTS

	1977	1982	1987	1992
LIVINGSTON MONTANA				
TOTAL PEAK HOUR VFR DEMAND	20.	21.	22.	23.
GA IFR PEAK HOUR DEMAND	1.	1.	2.	3.

OPERATIONAL DATA

DEMAND FORECAST INDICATORS	1977	1982	1987	1992
1 TOTAL GA ANNUAL OPERATIONS	10100.0	10600.0	11000.0	11600.0
2 GA PEAK HOUR OPERATIONS	20.0	21.0	22.0	23.0
3 PERCENT GA ITINERANT OPERATIONS	50.0	50.0	50.0	50.0
4 BASED AIRCRAFT UNDER 12500 LBS	25.0	27.0	28.0	30.0
5 BASED AIRCRAFT OVER 12500 LBS	1.0	1.0	1.0	1.0

AIRCRAFT MIX AND CAPACITY FORECASTS

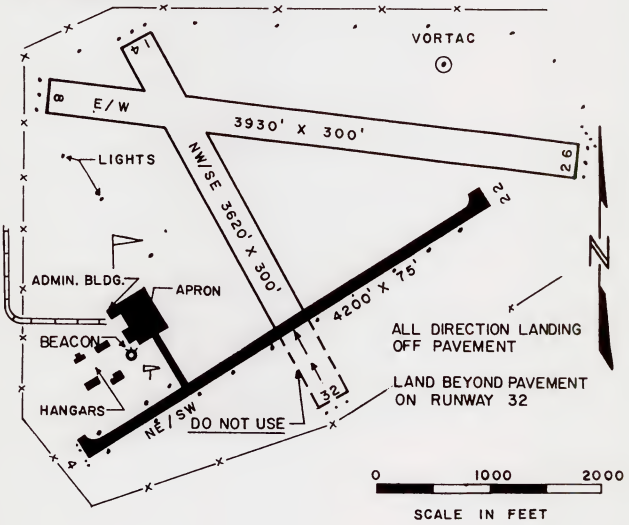
	1972	1977	1982	1987	1992
AIRCRAFT TYPE *A*	0	0	0	0	0
AIRCRAFT TYPE *B*	0	0	0	0	0
AIRCRAFT TYPE *C*	0	2	4	5	6
AIRCRAFT TYPE *D+E+F*	100	98	96	95	94
HOURLY CAPACITY VFR	95	97	99	99	99
HOURLY CAPACITY IFR	53	52	52	52	52
ANNUAL CAPACITY(000)	132	135	138	138	138

DEVELOPMENT COST SUMMARY

PLAN PERIOD	PARTICIPATION	LAND SIDE	AIR SIDE	TOTAL
BEFORE 1977	FEDERAL	$	$ 75,000	$ 75,000
	STATE/LOCAL		19,000	19,000
	TOTAL		94,000	94,000
1977	FEDERAL	12,000		12,000
	STATE/LOCAL	16,000		16,000
	TOTAL	28,000		28,000
1982	FEDERAL	1,000		1,000
	STATE/LOCAL	2,000		2,000
	TOTAL	3,000		3,000
1987	FEDERAL			
	STATE/LOCAL	2,000		2,000
	TOTAL	2,000		2,000
1992	FEDERAL	1,000		1,000
	STATE/LOCAL	2,000		2,000
	TOTAL	3,000		3,000
TOTAL COSTS TO 1992	FEDERAL	14,000	75,000	89,000
	STATE/LOCAL	22,000	19,000	41,000
	TOTAL	36,000	94,000	130,000

LIVINGSTON

AIRPORT LAYOUT



MSASP AIRFIELD DEVELOPMENT COSTS IN THOUSANDS OF 1972 DOLLARS

LIVINGSTON

AIRSIDE

	FED SHARE	TOTAL	FED GRANTS	STATE/LOCAL
BEFORE 1977				
1 OVERLAY RUNWAY(4/22)	79.46	94.50	75.08	19.41
TOTAL ($000)		94.50	75.09	19.41
TOTAL PROJECT COSTS		94.50	75.09	19.41

LANDSIDE

FEDERAL SHARE OF THE PROJECT COSTS

	FED SHARE	1977	1982	1987	1992
1 GA TERMINAL BUILDING AREA(SF)	0.00	0.	0.	0.	0.
2 GA AIRCRAFT LOADING POSITIONS(NUMBER)	0.00	0.	0.	0.	0.
3 GA AC LOADING & BYPASS APRON AREA(SY)	79.46	0.	0.	0.	0.
4 ITINERANT AIRCRAFT PARKING AREA(SY)	79.46	0.	0.	0.	0.
5 GA BASED AIRCRAFT TIE-DOWN AREA(SY)	79.46	11504.	834.	417.	834.
6 GA CONV HANGAR BLDG AND APRON AREA(SY)	79.46	0.	0.	0.	0.
7 GA *T* HANGAR BLDG & APRON AREA(SY)	79.46	0.	0.	0.	0.
8 GA PUBLIC VEHICULAR PARKING SPACE(NO.)	0.00	0.	0.	0.	0.
9 GA PUBLIC VEHICULAR PARKING AREA(SY)	0.00	0.	0.	0.	0.
10 AIRPORT MAINTENANCE APRON AREA(SY)	79.46	0.	0.	0.	0.
11 AIRPORT MAINTENANCE BUILDING(SF)	0.00	0.	0.	0.	0.
TOTAL IN THOUSANDS OF DOLLARS		11.5	0.8	0.4	0.8

PROJECT COST LESS FEDERAL GRANTS

	FED SHARE	1977	1982	1987	1992
1 GA TERMINAL BUILDING AREA(SF)	0.00	2200.	810.	810.	810.
2 GA AIRCRAFT LOADING POSITIONS(NUMBER)	0.00	0.	0.	0.	0.
3 GA AC LOADING & BYPASS APRON AREA(SY)	79.46	0.	0.	0.	0.
4 ITINERANT AIRCRAFT PARKING AREA(SY)	79.46	0.	0.	0.	0.
5 GA BASED AIRCRAFT TIE-DOWN AREA(SY)	79.46	2973.	215.	107.	215.
6 GA CONV HANGAR BLDG AND APRON AREA(SY)	79.46	0.	0.	0.	0.
7 GA *T* HANGAR BLDG & APRON AREA(SY)	79.46	0.	0.	0.	0.
8 GA PUBLIC VEHICULAR PARKING SPACE(NO.)	0.00	0.	0.	0.	0.
9 GA PUBLIC VEHICULAR PARKING AREA(SY)	0.00	10469.	748.	748.	748.
10 AIRPORT MAINTENANCE APRON AREA(SY)	79.46	0.	0.	0.	0.
11 AIRPORT MAINTENANCE BUILDING(SF)	0.00	0.	0.	0.	0.
TOTAL IN THOUSANDS OF DOLLARS		15.6	1.8	1.7	1.8

MALTA

Malta is situated in northern Montana on the Milk River, 18 miles east of the Fort Belknap Indian Reservation. U. S. Routes 2 and 191 provide a good road system to the east, west and southwest. Passenger rail service is provided by Amtrak on a daily basis between Glasgow and Havre.

The airport is southwest of town off U. S. 191. Only 'D & E' type aircraft are presently using this facility. Beginning in 1977 'C' type aircraft will be operating.

Facility Requirements

Small land side expansion will be needed throughout the forecast period. Air side expansion will consist of a runway extension before 1977 and a runway overlay in 1982.

Name: MALTA

Site Number:. 12438

County:. PHILLIPS

District: 1

PEAK HOUR IFR AND VFR DEMAND FORECASTS

	1977	1982	1987	1992
MALTA, MONTANA				
TOTAL PEAK HOUR VFR DEMAND	9.	14.	17.	20.
GA IFR PEAK HOUR DEMAND	0.	1.	2.	2.

OPERATIONAL DATA

DEMAND FORECAST INDICATORS

	1977	1982	1987	1992
1 TOTAL GA ANNUAL OPERATIONS	4000.0	6000.0	8000.0	10000.0
2 GA PEAK HOUR OPERATIONS	9.0	14.0	17.0	20.0
3 PERCENT GA ITINERANT OPERATIONS	25.0	20.0	19.0	17.0
4 BASED AIRCRAFT UNDER 12500 LBS	15.0	17.0	20.0	24.0
5 BASED AIRCRAFT OVER 12500 LBS	0.0	0.0	0.0	0.0

AIRCRAFT MIX AND CAPACITY FORECASTS

	1972	1977	1982	1987	1992
AIRCRAFT TYPE *A*	0	0	0	0	0
AIRCRAFT TYPE *B*	0	0	0	0	0
AIRCRAFT TYPE *C*	0	3	8	12	14
AIRCRAFT TYPE *D+E*	100	97	92	88	86
HOURLY CAPACITY VFR	77	88	99	99	99
HOURLY CAPACITY IFR	0	52	52	52	52
ANNUAL CAPACITY(000)	107	122	138	141	144

DEVELOPMENT COST SUMMARY

PLAN PERIOD	PARTICIPATION	LAND SIDE	AIR SIDE	TOTAL
BEFORE 1977	FEDERAL	$	$ 52,000	$ 52,000
	STATE/LOCAL		13,000	13,000
	TOTAL		65,000	65,000
1977	FEDERAL			
	STATE/LOCAL	5,000		5,000
	TOTAL	5,000		5,000
1982	FEDERAL		59,000	59,000
	STATE/LOCAL	10,000	15,000	25,000
	TOTAL	10,000	74,000	84,000
1987	FEDERAL			
	STATE/LOCAL	5,000		5,000
	TOTAL	5,000		5,000
1992	FEDERAL			
	STATE/LOCAL	5,000		5,000
	TOTAL	5,000		5,000
TOTAL COSTS TO 1992	FEDERAL		111,000	111,000
	STATE/LOCAL	25,000	28,000	53,000
	TOTAL	25,000	139,000	164,000

MALTA

AIRSIDE

MSASP AIRFIELD DEVELOPMENT COSTS IN THOUSANDS OF 1972 DOLLARS

MALTA

	FED SHARE	TOTAL	FED GRANTS	STATE/LOCAL
BEFORE 1977				
1 EXTEND RUNWAY(7-25)				
A EARTHWORK	79.46	11.10	8.82	2.27
B EASEMENTS	79.46	0.50	0.39	0.10
C SITE PREPARATION	79.46	0.24	0.19	0.04
D DRAINAGE	79.46	3.00	2.38	0.61
E PAVING	79.46	50.00	39.72	10.27
TOTAL ($000)		64.86	51.54	13.34
1982				
2 OVERLAY RUNWAY(7-25)	79.46	74.25	58.99	15.25
TOTAL ($000)		74.25	59.00	15.25
TOTAL PROJECT COSTS		139.11	110.55	28.59

LANDSIDE

FEDERAL SHARE OF THE PROJECT COSTS

	FED SHARE	1977	1982	1987	1992
1 GA TERMINAL BUILDING AREA(SF)	0.00	0.	0.	0.	0.
2 GA AIRCRAFT LOADING POSITIONS(NUMBER)	0.00	0.	0.	0.	0.
3 GA AC LOADING & BYPASS APRON AREA(SY)	79.46	0.	0.	0.	0.
4 ITINERANT AIRCRAFT PARKING AREA(SY)	79.46	0.	0.	0.	0.
5 GA BASED AIRCRAFT TIE-DOWN AREA(SY)	79.46	0.	0.	0.	0.
6 GA CONV HANGAR BLDG AND APRON AREA(SY)	79.46	0.	0.	0.	0.
7 GA *T* HANGAR BLDG & APRON AREA(SY)	79.46	0.	0.	0.	0.
8 GA PUBLIC VEHICULAR PARKING SPACE(NO.)	0.00	0.	0.	0.	0.
9 GA PUBLIC VEHICULAR PARKING AREA(SY)	0.00	0.	0.	0.	0.
10 AIRPORT MAINTENANCE APRON AREA(SY)	79.46	0.	214.	286.	286.
11 AIRPORT MAINTENANCE BUILDING(SF)	0.00	0.	0.	0.	0.
TOTAL IN THOUSANDS OF DOLLARS		0.0	0.2	0.3	0.3

PROJECT COST LESS FEDERAL GRANTS

	FED SHARE	1977	1982	1987	1992
1 GA TERMINAL BUILDING AREA(SF)	0.00	0.	6340.	2430.	2430.
2 GA AIRCRAFT LOADING POSITIONS(NUMBER)	0.00	0.	0.	0.	0.
3 GA AC LOADING & BYPASS APRON AREA(SY)	79.46	0.	0.	0.	0.
4 ITINERANT AIRCRAFT PARKING AREA(SY)	79.46	0.	0.	0.	0.
5 GA BASED AIRCRAFT TIE-DOWN AREA(SY)	79.46	0.	0.	0.	0.
6 GA CONV HANGAR BLDG AND APRON AREA(SY)	79.46	0.	0.	0.	0.
7 GA *T* HANGAR BLDG & APRON AREA(SY)	79.46	0.	0.	0.	0.
8 GA PUBLIC VEHICULAR PARKING SPACE(NO.)	0.00	0.	0.	0.	0.
9 GA PUBLIC VEHICULAR PARKING AREA(SY)	0.00	5236.	3742.	2245.	2245.
10 AIRPORT MAINTENANCE APRON AREA(SY)	79.46	0.	55.	74.	74.
11 AIRPORT MAINTENANCE BUILDING(SF)	0.00	0.	0.	0.	0.
TOTAL IN THOUSANDS OF DOLLARS		5.2	10.1	4.8	4.8

MEADOW CREEK

Meadow Creek is a U. S. Forest Service landing strip in the Flathead National Forest of western Montana. The South Fork of the Flathead River runs one-half mile to the west of the landing strip. Small private aircraft (D & E type) will use this facility.

Facility Requirements

Only minimal land side additions are needed. The landing strip will need to be extended before 1977.

Name: MEADOW CREEK

Site Number:. 12443

County: FLATHEAD

District:. 10

PEAK HOUR IFR AND VFR DEMAND FORECASTS

	1977	1982	1987	1992
"EADOW CREEK, MONTANA				
TOTAL PEAK HOUR VFR DEMAND	1.	1.	1.	2.
GA IFR PEAK HOUR DEMAND	0.	0.	0.	0.

OPERATIONAL DATA

DEMAND FORECAST INDICATORS

	1977	1982	1987	1992
1 TOTAL GA ANNUAL OPERATIONS	200.0	300.0	400.0	500.0
2 GA PEAK HOUR OPERATIONS	1.0	1.0	1.0	2.0
3 PERCENT GA ITINERANT OPERATIONS	100.0	100.0	75.0	60.0
4 BASED AIRCRAFT UNDER 12500 LBS	0.0	0.0	1.0	1.0
5 BASED AIRCRAFT OVER 12500 LBS	0.0	0.0	0.0	0.0

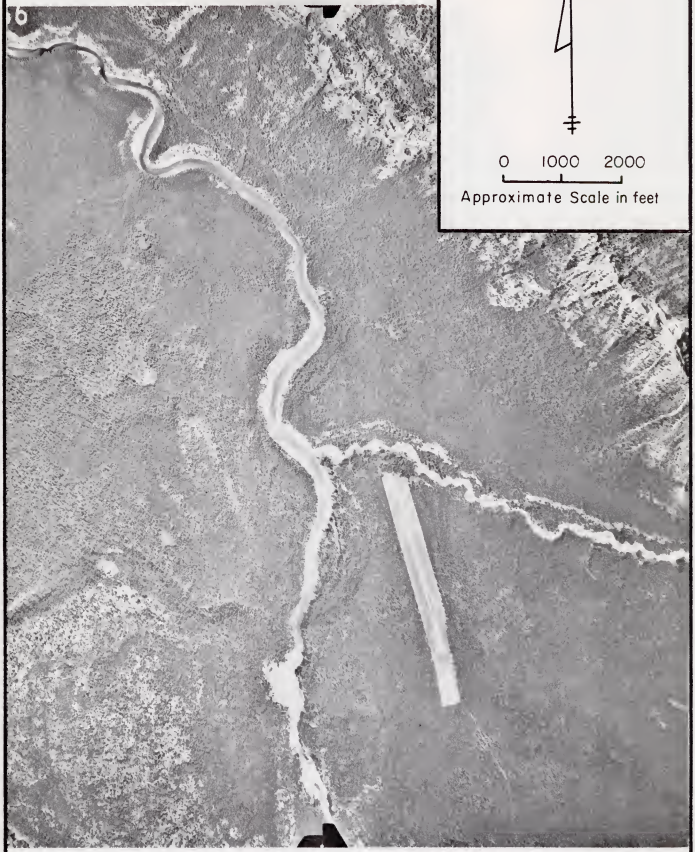
AIRCRAFT MIX AND CAPACITY FORECASTS

	1972	1977	1982	1987	1992
AIRCRAFT TYPE *A*	0	0	0	0	0
AIRCRAFT TYPE *B*	0	0	0	0	0
AIRCRAFT TYPE *C*	0	0	0	0	0
AIRCRAFT TYPE *D+E*	100	100	100	100	100
HOURLY CAPACITY VFR	77	88	99	99	99
HOURLY CAPACITY IFR	0	0	0	0	0
ANNUAL CAPACITY(000)	107	122	138	138	138

DEVELOPMENT COST SUMMARY

PLAN PERIOD	PARTICIPATION	LAND SIDE	AIR SIDE	TOTAL
BEFORE 1977	FEDERAL	$	$ 12,000	$ 12,000
	STATE/LOCAL			
	TOTAL		12,000	12,000
1977	FEDERAL	1,000		1,000
	STATE/LOCAL			
	TOTAL	1,000		1,000
1982	FEDERAL			
	STATE/LOCAL			
	TOTAL			
1987	FEDERAL	2,000		2,000
	STATE/LOCAL			
	TOTAL	2,000		2,000
1992	FEDERAL	3,000		3,000
	STATE/LOCAL			
	TOTAL	3,000		3,000
TOTAL COSTS TO 1992	FEDERAL	6,000	12,000	18,000
	STATE/LOCAL			
	TOTAL	6,000	12,000	18,000

MEADOW CREEK



MSASP AIRFIELD DEVELOPMENT COSTS IN THOUSANDS OF 1972 DOLLARS

MEADOW CREEK

AIRSIDE

	FED SHARE	TOTAL	FED GRANTS	STATE/LOCAL
BEFORE 1977				
1 EXTEND LANDING STRIP				
A EARTHWORK	100.00	9.60	9.59	0.00
B SITE PREPARATION	100.00	1.20	1.19	0.00
2 OBSTRUCTION REMOVAL	100.00	1.00	1.00	0.00
TOTAL ($000)		11.81	11.81	0.01
TOTAL PROJECT COSTS		11.81	11.81	0.01

LANDSIDE

FEDERAL SHARE OF THE PROJECT COSTS

	FED SHARE	1977	1982	1987	1992
1 GA TERMINAL BUILDING AREA(SF)	100.00	0.	0.	0.	0.
2 GA AIRCRAFT LOADING POSITIONS(NUMBER)	100.00	0.	0.	0.	0.
3 GA AC LOADING & BYPASS APRON AREA(SY)	100.00	0.	0.	0.	1020.
4 ITINERANT AIRCRAFT PARKING AREA(SY)	100.00	0.	0.	0.	1530.
5 GA BASED AIRCRAFT TIE-DOWN AREA(SY)	100.00	3.	0.	525.	0.
6 GA CONV HANGAR BLDG AND APRON AREA(SY)	100.00	0.	0.	408.	0.
7 GA *T* HANGAR BLDG & APRON AREA(SY)	100.00	0.	0.	608.	0.
8 GA PUBLIC VEHICULAR PARKING SPACE(NO.)	100.00	0.	0.	0.	0.
9 GA PUBLIC VEHICULAR PARKING AREA(SY)	100.00	748.	0.	0.	748.
10 AIRPORT MAINTENANCE APRON AREA(SY)	100.00	36.	18.	18.	18.
11 AIRPORT MAINTENANCE BUILDING(SF)	100.00	10.	5.	5.	5.
TOTAL IN THOUSANDS OF DOLLARS		0.8	0.0	1.6	3.3

PROJECT COST LESS FEDERAL GRANTS

	FED SHARE	1977	1982	1987	1992
1 GA TERMINAL BUILDING AREA(SF)	100.00	0.	0.	0.	0.
2 GA AIRCRAFT LOADING POSITIONS(NUMBER)	100.00	0.	0.	0.	0.
3 GA AC LOADING & BYPASS APRON AREA(SY)	100.00	0.	0.	0.	0.
4 ITINERANT AIRCRAFT PARKING AREA(SY)	100.00	0.	0.	0.	0.
5 GA BASED AIRCRAFT TIE-DOWN AREA(SY)	100.00	0.	0.	0.	0.
6 GA CONV HANGAR BLDG AND APRON AREA(SY)	100.00	0.	0.	0.	0.
7 GA *T* HANGAR BLDG & APRON AREA(SY)	100.00	0.	0.	0.	0.
8 GA PUBLIC VEHICULAR PARKING SPACE(NO.)	100.00	0.	0.	0.	0.
9 GA PUBLIC VEHICULAR PARKING AREA(SY)	100.00	0.	0.	0.	0.
10 AIRPORT MAINTENANCE APRON AREA(SY)	100.00	0.	0.	0.	0.
11 AIRPORT MAINTENANCE BUILDING(SF)	100.00	0.	0.	0.	0.
TOTAL IN THOUSANDS OF DOLLARS		0.0	0.0	0.0	0.0

MEDICINE LAKE

The town is situated in northeast Montana two miles east of the Fort Peck Indian Reservation, and 20 miles south of Plentywood on State Route 16.

The airport is east of town off State Route 16. Only small private aircraft (D & E) are expected.

Facility Requirements

Only minimal land side work is required; however, runway extension will be accompanied by considerable earthwork and a road relocation. The extension is recommended before 1977.

Name: MEDICINE LAKE

Site Number: 12443.5

County: SHERIDAN

District: 1

PEAK HOUR IFR AND VFR DEMAND FORECASTS

	1977	1982	1987	1992
MEDICINE LAKE, MONTANA				
TOTAL PEAK HOUR VFR DEMAND	1.	1.	1.	2.
GA IFR PEAK HOUR DEMAND	0.	0.	0.	0.

OPERATIONAL DATA

DEMAND FORECAST INDICATORS

	1977	1982	1987	1992
1 TOTAL GA ANNUAL OPERATIONS	200.0	300.0	400.0	500.0
2 GA PEAK HOUR OPERATIONS	1.0	1.0	1.0	2.0
3 PERCENT GA ITINERANT OPERATIONS	100.0	100.0	75.0	60.0
4 BASED AIRCRAFT UNDER 12500 LBS	0.0	0.0	1.0	1.0
5 BASED AIRCRAFT OVER 12500 LBS	0.0	0.0	0.0	0.0

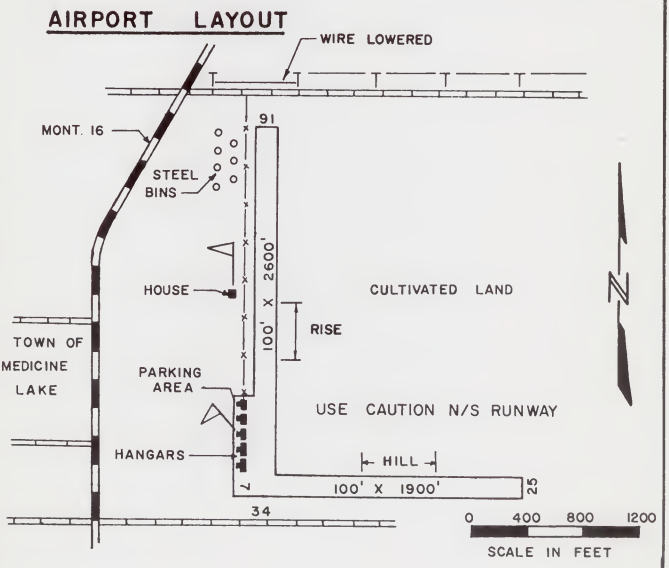
AIRCRAFT MIX AND CAPACITY FORECASTS

	1972	1977	1982	1987	1992
AIRCRAFT TYPE *A*	0	0	0	0	0
AIRCRAFT TYPE *B*	0	0	0	0	0
AIRCRAFT TYPE *C*	0	0	0	0	0
AIRCRAFT TYPE *D+E*	100	100	100	100	100
HOURLY CAPACITY VFR	77	88	99	99	99
HOURLY CAPACITY IFR	0	0	0	0	0
ANNUAL CAPACITY(000)	107	122	138	138	138

DEVELOPMENT COST SUMMARY

PLAN PERIOD	PARTICIPATION	LAND SIDE	AIR SIDE	TOTAL
BEFORE 1977	FEDERAL	$	$	$
	STATE/LOCAL		50,000	50,000
	TOTAL		50,000	50,000
1977	FEDERAL			
	STATE/LOCAL	1,000		1,000
	TOTAL	1,000		1,000
1982	FEDERAL			
	STATE/LOCAL			
	TOTAL			
1987	FEDERAL			
	STATE/LOCAL	1,000		1,000
	TOTAL	1,000		1,000
1992	FEDERAL			
	STATE/LOCAL	3,000		3,000
	TOTAL	3,000		3,000
TOTAL COSTS TO 1992	FEDERAL			
	STATE/LOCAL	5,000	50,000	55,000
	TOTAL	5,000	50,000	55,000

MEDICINE LAKE



MSASP AIRFIELD DEVELOPMENT COSTS IN THOUSANDS OF 1972 DOLLARS

MEDICINE LAKE

AIRSIDE

	FED SHARE	TOTAL	FED GRANTS	STATE/LOCAL
BEFORE 1977				
1 EXTEND LANDING STRIP				
A EARTHWORK	0.00	37.50	0.00	37.50
B LAND ACQUISITION	0.00	1.66	0.00	1.66
C EASEMENTS	0.00	0.75	0.00	0.75
D SITE PREPARATION	0.00	2.64	0.00	2.64
E LIRL	0.00	2.50	0.00	2.50
2 ROAD RELOCATION	0.00	5.00	0.00	5.00
TOTAL ($000)		50.07	0.02	50.07
TOTAL PROJECT COSTS		50.07	0.02	50.07

LANDSIDE

FEDERAL SHARE OF THE PROJECT COSTS

	FED SHARE	1977	1982	1987	1992
1 GA TERMINAL BUILDING AREA(SF)	0.00	0.	0.	0.	0.
2 GA AIRCRAFT LOADING POSITIONS(NUMBER)	0.00	0.	0.	0.	0.
3 GA AC LOADING & BYPASS APRON AREA(SY)	0.00	0.	0.	0.	0.
4 ITINERANT AIRCRAFT PARKING AREA(SY)	0.00	0.	0.	0.	0.
5 GA BASED AIRCRAFT TIE-DOWN AREA(SY)	0.00	0.	0.	0.	0.
6 GA CONV HANGAR BLDG AND APRON AREA(SY)	0.00	0.	0.	0.	0.
7 GA *T* HANGAR BLDG & APRON AREA(SY)	0.00	0.	0.	0.	0.
8 GA PUBLIC VEHICULAR PARKING SPACE(NO.)	0.00	0.	0.	0.	0.
9 GA PUBLIC VEHICULAR PARKING AREA(SY)	0.00	0.	0.	0.	0.
10 AIRPORT MAINTENANCE APRON AREA(SY)	0.00	0.	0.	0.	0.
11 AIRPORT MAINTENANCE BUILDING(SF)	0.00	0.	0.	0.	0.
TOTAL IN THOUSANDS OF DOLLARS		0.0	0.0	0.0	0.0

PROJECT COST LESS FEDERAL GRANTS

	FED SHARE	1977	1982	1987	1992
1 GA TERMINAL BUILDING AREA(SF)	0.00	0.	0.	0.	0.
2 GA AIRCRAFT LOADING POSITIONS(NUMBER)	0.00	0.	0.	0.	0.
3 GA AC LOADING & BYPASS APRON AREA(SY)	0.00	0.	0.	0.	1020.
4 ITINERANT AIRCRAFT PARKING AREA(SY)	0.00	0.	0.	0.	1530.
5 GA BASED AIRCRAFT TIE-DOWN AREA(SY)	0.00	3.	0.	525.	0.
6 GA CONV HANGAR BLDG AND APRON AREA(SY)	0.00	0.	0.	408.	0.
7 GA *T* HANGAR BLDG & APRON AREA(SY)	0.00	0.	0.	0.	0.
8 GA PUBLIC VEHICULAR PARKING SPACE(NO.)	0.00	0.	0.	0.	0.
9 GA PUBLIC VEHICULAR PARKING AREA(SY)	0.00	748.	0.	0.	748.
10 AIRPORT MAINTENANCE APRON AREA(SY)	0.00	36.	18.	18.	18.
11 AIRPORT MAINTENANCE BUILDING(SF)	0.00	10.	5.	5.	5.
TOTAL IN THOUSANDS OF DOLLARS		0.8	0.0	1.0	3.3

MORGAN

This is a border crossing landing strip located 54 miles north of Malta on county road 242. Only 'D & E' type aircraft are expected.

Facility Requirements

Minimal additions for land side items are needed. Air side expansion will require a slightly extended runway before 1977.

Name: MORGAN

Site Number:. 12454.21

County:. PHILLIPS

District:. 1

PEAK HOUR IFR AND VFR DEMAND FORECASTS

	1977	1982	1987	1992
MORGAN, MONTANA				
TOTAL PEAK HOUR VFR DEMAND	1.	1.	1.	2.
GA IFR PEAK HOUR DEMAND	0.	0.	0.	0.

OPERATIONAL DATA

DEMAND FORECAST INDICATORS	1977	1982	1987	1992
1 TOTAL GA ANNUAL OPERATIONS	200.0	300.0	400.0	500.0
2 GA PEAK HOUR OPERATIONS	1.0	1.0	1.0	2.0
3 PERCENT GA ITINERANT OPERATIONS	100.0	100.0	75.0	60.0
4 BASED AIRCRAFT UNDER 12500 LBS	0.0	0.0	1.0	1.0
5 BASED AIRCRAFT OVER 12500 LBS	0.0	0.0	0.0	0.0

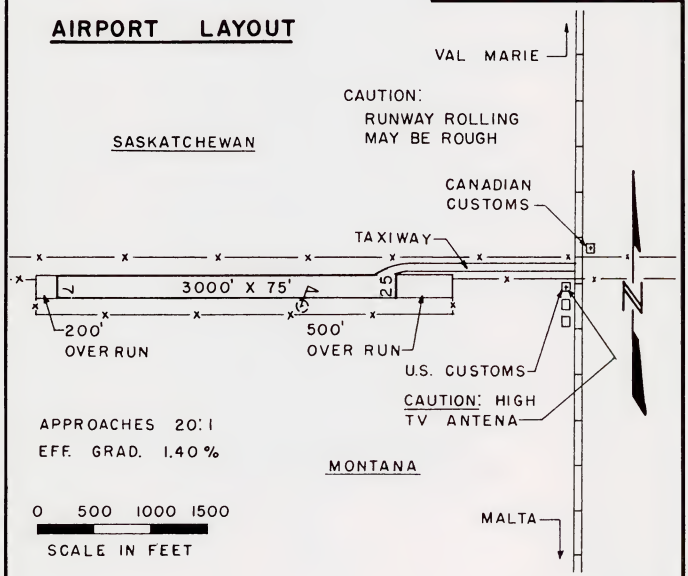
AIRCRAFT MIX AND CAPACITY FORECASTS

	1972	1977	1982	1987	1992
AIRCRAFT TYPE *A*	0	0	0	0	0
AIRCRAFT TYPE *B*	0	0	0	0	0
AIRCRAFT TYPE *C*	0	0	0	0	0
AIRCRAFT TYPE *D+E*	100	100	100	100	100
HOURLY CAPACITY VFR	77	88	99	99	99
HOURLY CAPACITY IFR	0	0	0	0	0
ANNUAL CAPACITY(000)	107	122	138	138	138

DEVELOPMENT COST SUMMARY

PLAN PERIOD	PARTICIPATION	LAND SIDE	AIR SIDE	TOTAL
BEFORE 1977	FEDERAL	$	$	$
	STATE/LOCAL		6,000	6,000
	TOTAL		6,000	6,000
1977	FEDERAL			
	STATE/LOCAL	1,000		1,000
	TOTAL	1,000		1,000
1982	FEDERAL			
	STATE/LOCAL			
	TOTAL			
1987	FEDERAL			
	STATE/LOCAL	2,000		2,000
	TOTAL	2,000		2,000
1992	FEDERAL			
	STATE/LOCAL	3,000		3,000
	TOTAL	3,000		3,000
TOTAL COSTS TO 1992	FEDERAL			
	STATE/LOCAL	6,000	6,000	12,000
	TOTAL	6,000	6,000	12,000

MORGAN


AIRPORT LAYOUT
VAL MARIE
CAUTION:
RUNWAY ROLLING
MAY BE ROUGH
SASKATCHEWAN
CANADIAN
CUSTOMS
TAXIWAY
7
3000' X 75'
25
200'
OVER RUN
500'
OVER RUN
U.S. CUSTOMS
CAUTION: HIGH
TV ANTENA
APPROACHES 20:1
EFF. GRAD. 1.40%
MONTANA
0 500 1000 1500
SCALE IN FEET
MALTA

MSASP AIRFIELD DEVELOPMENT COSTS IN THOUSANDS OF 1972 DOLLARS

MORGAN

AIRSIDE

	FED SHARE	TOTAL	FED GRANTS	STATE/LOCAL
BEFORE 1977				
1 EXTEND RUNWAY(7-25)				
A EARTHWORK	0.00	3.00	0.00	3.00
B LAND ACQUISITION	0.00	1.08	0.00	1.08
C EASEMENTS	0.00	0.40	0.00	0.40
D SITE PREPARATION	0.00	1.44	0.00	1.44
2 OBSTRUCTION REMOVAL	0.00	0.35	0.00	0.35
TOTAL ($000)		6.29	0.02	6.29
TOTAL PROJECT COSTS		6.29	0.02	6.29

LANDSIDE

FEDERAL SHARE OF THE PROJECT COST$

	FED SHARE	1977	1982	1987	1992
1 GA TERMINAL BUILDING AREA(SF)	0.00	0.	0.	0.	0.
2 GA AIRCRAFT LOADING POSITIONS(NUMBER)	0.00	0.	0.	0.	0.
3 GA AC LOADING & BYPASS APRON AREA(SY)	0.00	0.	0.	0.	0.
4 ITINERANT AIRCRAFT PARKING AREA(SY)	0.00	0.	0.	0.	0.
5 GA BASED AIRCRAFT TIE-DOWN AREA(SY)	0.00	0.	0.	0.	0.
6 GA CONV HANGAR BLDG AND APRON AREA(SY)	0.00	0.	0.	0.	0.
7 GA *T* HANGAR BLDG & APRON AREA(SY)	0.00	0.	0.	0.	0.
8 GA PUBLIC VEHICULAR PARKING SPACE(NO.)	0.00	0.	0.	0.	0.
9 GA PUBLIC VEHICULAR PARKING AREA(SY)	0.00	0.	0.	0.	0.
10 AIRPORT MAINTENANCE APRON AREA(SY)	0.00	0.	0.	0.	0.
11 AIRPORT MAINTENANCE BUILDING(SF)	0.00	0.	0.	0.	0.
TOTAL IN THOUSANDS OF DOLLARS		0.0	0.0	0.0	0.0

PROJECT COST LESS FEDERAL GRANTS

	FED SHARE	1977	1982	1987	1992
1 GA TERMINAL BUILDING AREA(SF)	0.00	0.	0.	0.	0.
2 GA AIRCRAFT LOADING POSITIONS(NUMBER)	0.00	0.	0.	0.	0.
3 GA AC LOADING & BYPASS APRON AREA(SY)	0.00	0.	0.	0.	1020.
4 ITINERANT AIRCRAFT PARKING AREA(SY)	0.00	0.	0.	0.	1530.
5 GA BASED AIRCRAFT TIE-DOWN AREA(SY)	0.00	3.	0.	525.	0.
6 GA CONV HANGAR BLDG AND APRON AREA(SY)	0.00	0.	0.	408.	0.
7 GA *T* HANGAR BLDG & APRON AREA(SY)	0.00	0.	0.	608.	0.
8 GA PUBLIC VEHICULAR PARKING SPACE(NO.)	0.00	0.	0.	0.	0.
9 GA PUBLIC VEHICULAR PARKING AREA(SY)	0.00	748.	0.	0.	748.
10 AIRPORT MAINTENANCE APRON AREA(SY)	0.00	36.	18.	18.	18.
11 AIRPORT MAINTENANCE BUILDING(SF)	0.00	10.	5.	5.	5.
TOTAL IN THOUSANDS OF DOLLARS		0.8	0.0	1.6	3.3

OPHEIM

The town of Opheim is situated in northwest Montana 10 miles south of the Canadian - U. S. border, and 51 miles north of Glasgow on state route 247.

The airport is northwest of town. Only 'D & E' aircraft type activity is expected.

Facility Requirements

Slight land side work is needed and the landing strip should be extended before 1977.

Name: OPHEIM

Site Number: 12464.2

County: VALLEY

District:. 1

PEAK HOUR IFR AND VFR DEMAND FORECASTS

	1977	1982	1987	1992
OPHEIM MONTANA				
TOTAL PEAK HOUR VFR DEMAND	3.	3.	4.	4.
GA IFR PEAK HOUR DEMAND	0.	0.	0.	0.

OPERATIONAL DATA

DEMAND FORECAST INDICATORS	1977	1982	1987	1992
1 TOTAL GA ANNUAL OPERATIONS	1330.0	1330.0	1670.0	1670.0
2 GA PEAK HOUR OPERATIONS	3.0	3.0	4.0	4.0
3 PERCENT GA ITINERANT OPERATIONS	30.0	30.0	30.0	30.0
4 BASED AIRCRAFT UNDER 12500 LBS	3.0	4.0	4.0	4.0
5 BASED AIRCRAFT OVER 12500 LBS	0.0	0.0	0.0	0.0

AIRCRAFT MIX AND CAPACITY FORECASTS

	1972	1977	1982	1987	1992
AIRCRAFT TYPE *A*	0	0	0	0	0
AIRCRAFT TYPE *B*	0	0	0	0	0
AIRCRAFT TYPE *C*	0	0	0	0	0
AIRCRAFT TYPE *D+E*	100	100	100	100	100
HOURLY CAPACITY VFR	77	88	99	99	99
HOURLY CAPACITY IFR	0	0	0	0	0
ANNUAL CAPACITY(000)	107	122	138	138	138

DEVELOPMENT COST SUMMARY

PLAN PERIOD	PARTICIPATION	LAND SIDE	AIR SIDE	TOTAL
BEFORE 1977	FEDERAL			
	STATE/LOCAL	$	$ 11,000	$ 11,000
	TOTAL		11,000	11,000
1977	FEDERAL			
	STATE/LOCAL	2,000		2,000
	TOTAL	2,000		2,000
1982	FEDERAL			
	STATE/LOCAL	1,000		1,000
	TOTAL	1,000		1,000
1987	FEDERAL			
	STATE/LOCAL	2,000		2,000
	TOTAL	2,000		2,000
1992	FEDERAL			
	STATE/LOCAL			
	TOTAL			
TOTAL COSTS TO 1992	FEDERAL			
	STATE/LOCAL	5,000	11,000	16,000
	TOTAL	5,000	11,000	16,000

OPHEIM

MSASP AIRFIELD DEVELOPMENT COSTS IN THOUSANDS OF 1972 DOLLARS

OPHEIM

	FED SHARE	TOTAL	FED GRANTS	STATE/LOCAL
BEFORE 1977				
1 EXTEND LANDING STRIP				
A EARTHWORK	0.00	4.80	0.00	4.80
B LAND ACQUISITION	0.00	2.66	0.00	2.66
C EASEMENTS	0.00	0.46	0.00	0.46
D SITE PREPARATION	0.00	2.66	0.00	2.66
2 OBSTRUCTION REMOVAL	0.00	0.20	0.00	0.20
TOTAL ($000)		10.80	0.02	10.80
TOTAL PROJECT COSTS		10.80	0.02	10.80

AIRSIDE

FEDERAL SHARE OF THE PROJECT COSTS

	FED SHARE	1977	1982	1987	1992
1 GA TERMINAL BUILDING AREA(SF)	0.00	0.	0.	0.	0.
2 GA AIRCRAFT LOADING POSITIONS(NUMBER)	0.00	0.	0.	0.	0.
3 GA AC LOADING & BYPASS APRON AREA(SY)	0.00	0.	0.	0.	0.
4 ITINERANT AIRCRAFT PARKING AREA(SY)	0.00	0.	0.	0.	0.
5 GA BASED AIRCRAFT TIE-DOWN AREA(SY)	0.00	0.	0.	0.	0.
6 GA CONV HANGAR BLDG AND APRON AREA(SY)	0.00	0.	0.	0.	0.
7 GA *T* HANGAR BLDG & APRON AREA(SY)	0.00	0.	0.	0.	0.
8 GA PUBLIC VEHICULAR PARKING SPACE(NO.)	0.00	0.	0.	0.	0.
9 GA PUBLIC VEHICULAR PARKIMG AREA(SY)	0.00	0.	0.	0.	0.
10 AIRPORT MAINTENANCE APRON AREA(SY)	0.00	0.	0.	0.	0.
11 AIRPORT MAINTENANCE BUILDING(SF)	0.00	0.	0.	0.	0.
TOTAL IN THOUSANDS OF DOLLARS		0.0	0.0	0.0	0.0

LANDSIDE

PROJECT COST LESS FEDERAL GRANTS

	FED SHARE	1977	1982	1987	1992
1 GA TERMINAL BUILDING AREA(SF)	0.00	0.	0.	0.	0.
2 GA AIRCRAFT LOADING POSITIONS(NUMBER)	0.00	0.	0.	0.	0.
3 GA AC LOADING & BYPASS APRON AREA(SY)	0.00	0.	0.	1020.	0.
4 ITINERANT AIRCRAFT PARKING AREA(SY)	0.00	0.	0.	0.	0.
5 GA BASED AIRCRAFT TIE-DOWN AREA(SY)	0.00	1578.	525.	0.	0.
6 GA CONV HANGAR BLDG AND APRON AREA(SY)	0.00	0.	0.	0.	0.
7 GA *T* HANGAR BLDG & APRON AREA(SY)	0.00	0.	0.	0.	0.
8 GA PUBLIC VEHICULAR PARKING SPACE(NO.)	0.00	0.	0.	0.	0.
9 GA PUBLIC VEHICULAR PARKIMG AREA(SY)	0.00	445.	0.	748.	0.
10 AIRPORT MAINTENANCE APRON AREA(SY)	0.00	239.	0.	61.	0.
11 AIRPORT MAINTENANCE BUILDING(SF)	0.00	67.	0.	17.	0.
TOTAL IN THOUSANDS OF DOLLARS		2.3	0.5	1.9	0.0

PHILIPSBURG

The town is situated in western Montana just east and south of the Deerlodge National Forest and 28 miles northwest of Anaconda on U. S. 10A.

The airport is located one-half mile south of town off U. S. 10A. 'C' type aircraft is expected to begin operating in 1977.

Facility Requirements

Large expansion is needed in terminal building area, and public vehicular parking area. Air side additions will include a runway extension before 1977 and a runway overlay in 1992. The runway extension will necessitate a road relocation.

NAVAIDS: An NDB should be installed before 1977 to accommodate the IFR traffic demand.

Name: PHILIPSBURG

Site Number: 12467

County: GRANITE

District: 12

PEAK HOUR IFR AND VFR DEMAND FORECASTS

	1977	1982	1987	1992
PHILIPSBURG, MONTANA				
TOTAL PEAK HOUR VFR DEMAND	17.	17.	18.	18.
GA IFR PEAK HOUR DEMAND	1.	1.	2.	2.

OPERATIONAL DATA

DEMAND FORECAST INDICATORS	1977	1982	1987	1992
1 TOTAL GA ANNUAL OPERATIONS	7780.0	7780.0	8000.0	8220.0
2 GA PEAK HOUR OPERATIONS	17.0	17.0	18.0	18.0
3 PERCENT GA ITINERANT OPERATIONS	45.0	45.0	45.0	45.0
4 BASED AIRCRAFT UNDER 12500 LBS	18.0	18.0	19.0	19.0
5 BASED AIRCRAFT OVER 12500 LBS	0.0	0.0	0.0	0.0

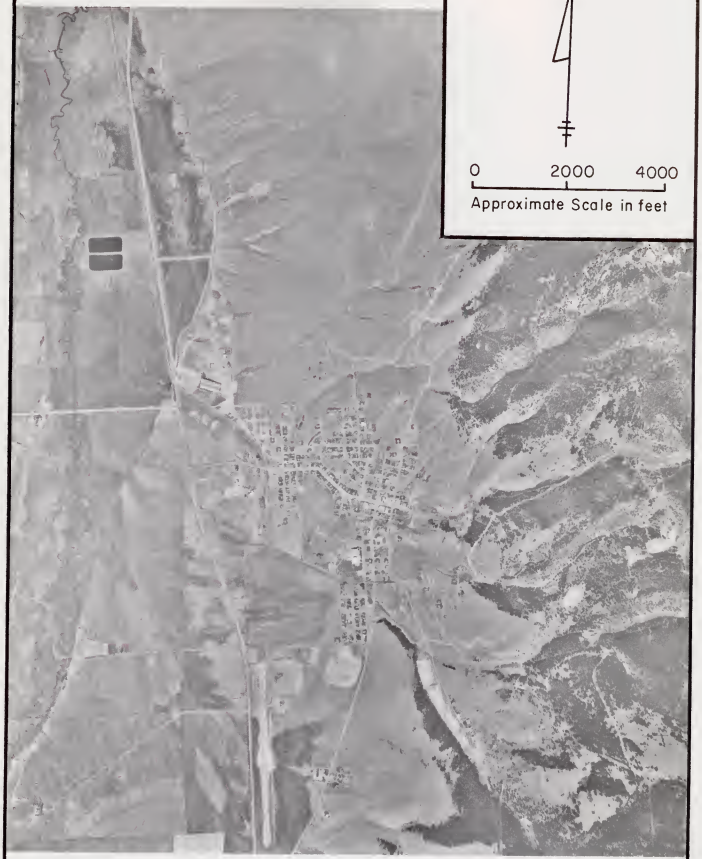
AIRCRAFT MIX AND CAPACITY FORECASTS

	1972	1977	1982	1987	1992
AIRCRAFT TYPE *A*	0	C	0	0	0
AIRCRAFT TYPE *B*	0	0	0	0	0
AIRCRAFT TYPE *C*	0	1	2	4	6
AIRCRAFT TYPE *D+E*	100	99	98	96	94
HOURLY CAPACITY VFR	77	88	99	99	99
HOURLY CAPACITY IFR	0	0	0	0	0
ANNUAL CAPACITY(000)	107	122	138	138	138

DEVELOPMENT COST SUMMARY

PLAN PERIOD	PARTICIPATION	LAND SIDE	AIR SIDE	TOTAL
BEFORE 1977	FEDERAL	$	$ 76,000	$ 76,000
	STATE/LOCAL		24,000	24,000
	TOTAL		100,000	100,000
1977	FEDERAL	15,000		15,000
	STATE/LOCAL	34,000		34,000
	TOTAL	49,000		49,000
1982	FEDERAL			
	STATE/LOCAL			
	TOTAL			
1987	FEDERAL	1,000		1,000
	STATE/LOCAL	2,000		2,000
	TOTAL	3,000		3,000
1992	FEDERAL			
	STATE/LOCAL			
	TOTAL			
TOTAL COSTS TO 1992	FEDERAL	16,000	76,000	92,000
	STATE/LOCAL	36,000	24,000	60,000
	TOTAL	52,000	100,000	152,000

PHILIPSBURG



MSASP AIRFIELD DEVELOPMENT COSTS IN THOUSANDS OF 1972 DOLLARS

PHILIPSBURG

AIRSIDE

		FED SHARE	TOTAL	FED GRANTS	STATE/LOCAL
	BEFORE 1977				
1	EXTEND RUNWAY(16-34)				
	A EARTHWORK	79.46	5.40	4.29	1.10
	B PASEMENTS	79.46	0.25	0.19	0.05
	C SITE PREPARATION	79.46	2.04	1.62	0.41
	D DRAINAGE	79.46	2.10	1.66	0.43
	E PAVING	79.46	5.34	4.24	1.09
	F LIGHTS (LIRL)	79.46	7.20	5.72	1.47
2	NDB	79.46	8.00	6.35	1.64
3	OVERLAY RUNWAY(16/34)	79.46	64.80	51.49	13.30
4	ROAD RELOCATION	0.00	5.00	0.00	5.00
	TOTAL ($000)		100.17	75.63	24.58
	TOTAL PROJECT COSTS		100.17	75.63	24.58

LANDSIDE

FEDERAL SHARE OF THE PROJECT COSTS

	FED SHARE	1977	1982	1987	1992
1 GA TERMINAL BUILDING AREA(SF)	0.00	0.	0.	0.	0.
2 GA AIRCRAFT LOADING POSITIONS(NUMBER)	0.00	0.	0.	0.	0.
3 GA AC LOADING & BYPASS APRON AREA(SY)	79.46	0.	0.	0.	0.
4 ITINERANT AIRCRAFT PARKING AREA(SY)	79.46	3576.	0.	0.	0.
5 GA BASED AIRCRAFT TIE-DOWN AREA(SY)	79.46	6891.	0.	417.	0.
6 GA CONV HANGAR BLDG AND APRON AREA(SY)	79.46	2917.	0.	162.	0.
7 GA *T* HANGAR BLDG & APRON AREA(SY)	79.46	0.	0.	0.	0.
8 GA PUBLIC VEHICULAR PARKING SPACE(NO.)	0.00	0.	0.	0.	0.
9 GA PUBLIC VEHICULAR PARKING AREA(SY)	0.00	0.	0.	0.	0.
10 AIRPORT MAINTENANCE APRON AREA(SY)	79.46	1113.	0.	31.	31.
11 AIRPORT MAINTENANCE BUILDING(SF)	0.00	0.	0.	0.	0.
TOTAL IN THOUSANDS OF DOLLARS		14.5	0.0	0.6	0.0

PROJECT COST LESS FEDERAL GRANTS

	FED SHARE	1977	1982	1987	1992
1 GA TERMINAL BUILDING AREA(SF)	0.00	14770.	0.	810.	0.
2 GA AIRCRAFT LOADING POSITIONS(NUMBER)	0.00	0.	0.	0.	0.
3 GA AC LOADING & BYPASS APRON AREA(SY)	79.46	0.	0.	0.	0.
4 ITINERANT AIRCRAFT PARKING AREA(SY)	79.46	924.	0.	0.	0.
5 GA BASED AIRCRAFT TIE-DOWN AREA(SY)	79.46	1781.	0.	107.	0.
6 GA CONV HANGAR BLDG AND APRON AREA(SY)	79.46	4426.	0.	246.	0.
7 GA *T* HANGAR BLDG & APRON AREA(SY)	79.46	0.	0.	0.	0.
8 GA PUBLIC VEHICULAR PARKING SPACE(NO.)	0.00	0.	0.	0.	0.
9 GA PUBLIC VEHICULAR PARKING AREA(SY)	0.00	10923.	0.	748.	0.
10 AIRPORT MAINTENANCE APRON AREA(SY)	79.46	287.	0.	8.	8.
11 AIRPORT MAINTENANCE BUILDING(SF)	0.00	389.	0.	11.	11.
TOTAL IN THOUSANDS OF DOLLARS		33.5	0.0	1.9	0.0

PLAINS

Plains is located in western Montana bounded on the east by the Flathead Indian Reservation and on the north, south and west by the Lolo National Forest. Thompson Falls lies 26 miles to the northwest on State Route 200. State Route 28 heads north into the reservation area from Plains.

The airport is one-half mile northwest of town. Small 'C' type aircraft activity is expected by 1982. The increase in activity may cause a noise problem for the town. Restrictive zoning should be considered to insure community development compatible with the airport.

Facility Requirements

Small land side work is needed in 1977. Included in air side additions are a runway extension and paving before 1977.

NAVAIDS: An NDB should be installed in 1977 to accommodate the IFR traffic demand.

Name: PLAINS

Site Number: 12468

County: SANDERS

District: 11

PEAK HOUR IFR AND VFR DEMAND FORECASTS

	1977	1982	1987	1992
PLAINS MONTANA				
TOTAL PEAK HOUR VFR DEMAND	7.	8.	9.	10.
GA IFR PEAK HOUR DEMAND	0.	1.	1.	1.

OPERATIONAL DATA

DEMAND FORECAST INDICATORS

	1977	1982	1987	1992
1 TOTAL GA ANNUAL OPERATIONS	3330.0	3750.0	4120.0	4570.0
2 GA PEAK HOUR OPERATIONS	7.0	8.0	9.0	10.0
3 PERCENT GA ITINERANT OPERATIONS	30.0	32.0	34.0	35.0
4 BASED AIRCRAFT UNDER 12500 LBS	7.0	8.0	9.0	10.0
5 BASED AIRCRAFT OVER 12500 LBS	0.0	0.0	0.0	0.0

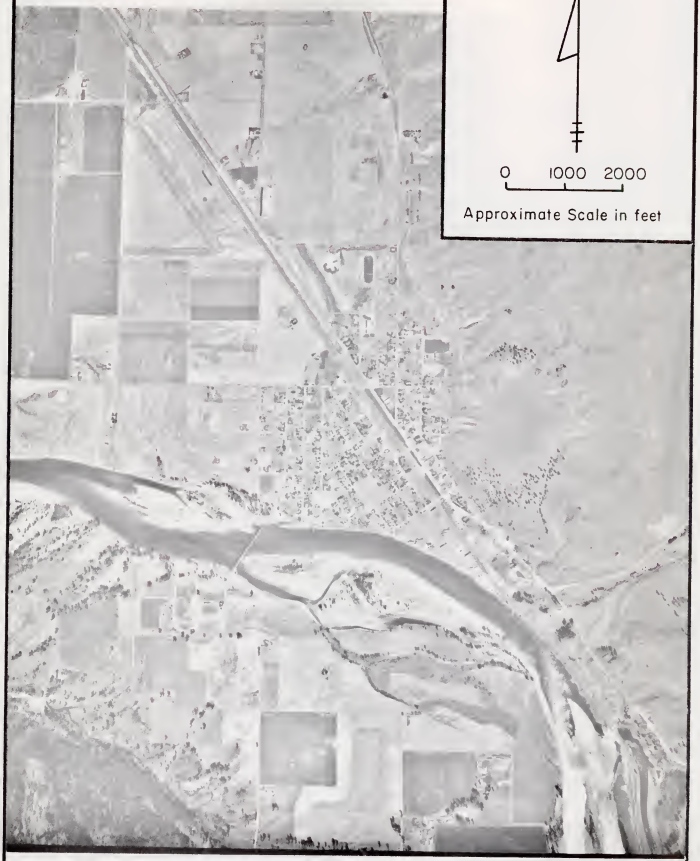
AIRCRAFT MIX AND CAPACITY FORECASTS

	1972	1977	1982	1987	1992
AIRCRAFT TYPE *A*	0	0	0	0	0
AIRCRAFT TYPE *B*	0	0	0	0	0
AIRCRAFT TYPE *C*	0	0	1	2	4
AIRCRAFT TYPE *D*E*	100	100	99	98	96
HOURLY CAPACITY VFR	77	88	99	99	99
HOURLY CAPACITY IFR	0	0	0	0	0
ANNUAL CAPACITY(000)	107	122	138	138	138

DEVELOPMENT COST SUMMARY

PLAN PERIOD	PARTICIPATION	LAND SIDE	AIR SIDE	TOTAL
BEFORE 1977	FEDERAL	$	$ 122,000	$ 122,000
	STATE/LOCAL		31,000	31,000
	TOTAL		153,000	153,000
1977	FEDERAL	2,000	6,000	8,000
	STATE/LOCAL	5,000	2,000	7,000
	TOTAL	7,000	8,000	15,000
1982	FEDERAL	1,000		1,000
	STATE/LOCAL	1,000		1,000
	TOTAL	2,000		2,000
1987	FEDERAL	1,000		1,000
	STATE/LOCAL	1,000		1,000
	TOTAL	2,000		2,000
1992	FEDERAL	1,000		1,000
	STATE/LOCAL	1,000		1,000
	TOTAL	2,000		2,000
TOTAL COSTS TO 1992	FEDERAL	5,000	128,000	133,000
	STATE/LOCAL	8,000	33,000	41,000
	TOTAL	13,000	161,000	174,000

PLAINS



MSASP AIRFIELD DEVELOPMENT COSTS IN THOUSANDS OF 1972 DOLLARS

PLAINS

AIRSIDE

	FED SHARE	TOTAL	FED GRANTS	STATE/LOCAL
BEFORE 1977				
1 EXTEND RUNWAY (12-30)				
A EARTHWORK	79.46	5.40	4.29	1.10
B LAND ACQUISITION	79.46	0.80	0.63	0.16
C EASEMENTS	79.46	0.30	0.23	0.06
D SITE PREP.	79.46	0.13	0.10	0.02
E DRAINAGE	79.46	6.00	4.76	1.23
2 PAVE RUNWAY (12-30)	79.46	140.00	111.24	28.75
3 LANDING AIDS				
A MIRL	79.46	0.33	0.26	0.06
TOTAL ($000)		153.00	121.58	31.45
1977				
4 NDB	79.46	8.00	6.35	1.64
TOTAL ($000)		8.00	6.36	1.64
TOTAL PROJECT COSTS		161.00	127.94	33.10

LANDSIDE

FEDERAL SHARE OF THE PROJECT COSTS

	FED SHARE	1977	1982	1987	1992
1 GA TERMINAL BUILDING AREA(SF)	0.00	0.	0.	0.	0.
2 GA AIRCRAFT LOADING POSITIONS(NUMBER)	0.00	0.	0.	0.	0.
3 GA AC LOADING & BYPASS APRON AREA(SY)	79.46	810.	0.	810.	0.
4 ITINERANT AIRCRAFT PARKING AREA(SY)	79.46	0.	0.	0.	0.
5 GA BASED AIRCRAFT TIE-DOWN AREA(SY)	79.46	396.	417.	417.	417.
6 GA CONV HANGAR BLDG AND APRON AREA(SY)	79.46	0.	0.	0.	0.
7 GA *T* HANGAR BLDG & APRON AREA(SY)	79.46	0.	0.	0.	0.
8 GA PUBLIC VEHICULAR PARKING SPACE(NO.)	0.00	0.	0.	0.	0.
9 GA PUBLIC VEHICULAR PARKING AREA(SY)	0.00	0.	0.	0.	0.
10 AIRPORT MAINTENANCE APRON AREA(SY)	79.46	476.	60.	53.	64.
11 AIRPORT MAINTENANCE BUILDING(SF)	0.00	0.	0.	0.	0.
TOTAL IN THOUSANDS OF DOLLARS		1.7	0.5	1.3	0.5

PROJECT COST LESS FEDERAL GRANTS

	FED SHARE	1977	1982	1987	1992
1 GA TERMINAL BUILDING AREA(SF)	0.00	0.	0.	0.	0.
2 GA AIRCRAFT LOADING POSITIONS(NUMBER)	0.00	0.	0.	0.	0.
3 GA AC LOADING & BYPASS APRON AREA(SY)	79.46	209.	0.	209.	0.
4 ITINERANT AIRCRAFT PARKING AREA(SY)	79.46	0.	0.	0.	0.
5 GA BASED AIRCRAFT TIE-DOWN AREA(SY)	79.46	102.	107.	107.	107.
6 GA CONV HANGAR BLDG AND APRON AREA(SY)	79.46	0.	0.	0.	0.
7 GA *T* HANGAR BLDG & APRON AREA(SY)	79.46	0.	0.	0.	0.
8 GA PUBLIC VEHICULAR PARKING SPACE(NO.)	0.00	0.	0.	0.	0.
9 GA PUBLIC VEHICULAR PARKING AREA(SY)	0.00	3889.	748.	748.	748.
10 AIRPORT MAINTENANCE APRON AREA(SY)	79.46	123.	15.	13.	16.
11 AIRPORT MAINTENANCE BUILDING(SF)	0.00	167.	21.	19.	23.
TOTAL IN THOUSANDS OF DOLLARS		4.5	0.9	1.1	0.9

PLENTYWOOD

Plentywood is situated in northwest Montana, 12 miles north of the Fort Peck Indian Reservation and 16 miles from the U. S. - Canadian border. The city is served by U. S. Routes 5 and 16.

The Sher-Wood airport is located one and a half miles northeast of town. The existing air fleet are 'D & E' type aircraft. In 1982 'C' type aircraft will begin to operate and increase during the period.

Facility Requirements

A moderate amount of land side work is needed in 1977 with public vehicular parking area being the large cost item. Air side expansion includes a small runway extension before 1977 and a large extension in 1992. Also a runway overlay in 1987 will be needed. All cost and items can be found on the following pages.

Name: PLENTYWOOD

Site Number:. 12470

County:. SHERIDAN

District:. 1

PEAK HOUR IFR AND VFR DEMAND FORECASTS

	1977	1982	1987	1992
PLENTYWOOD MONTANA				
TOTAL PEAK HOUR VFR DEMAND	22.	23.	24.	25.
GA IFR PEAK HOUR DEMAND	1.	2.	2.	3.

OPERATIONAL DATA

DEMAND FORECAST INDICATORS

	1977	1982	1987	1992
1 TOTAL GA ANNUAL OPERATIONS	11330.0	11560.0	11770.0	12570.0
2 GA PEAK HOUR OPERATIONS	22.0	23.0	24.0	25.0
3 PERCENT GA ITINERANT OPERATIONS	30.0	32.0	34.0	35.0
4 BASED AIRCRAFT UNDER 12500 LBS	16.0	18.0	20.0	22.0
5 BASED AIRCRAFT OVER 12500 LBS	0.0	0.0	0.0	0.0

AIRCRAFT MIX AND CAPACITY FORECASTS

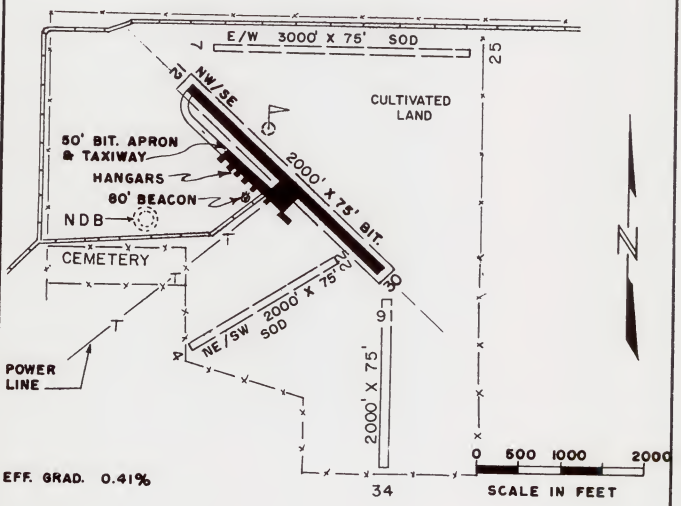
	1972	1977	1982	1987	1992
AIRCRAFT TYPE *A*	0	0	0	0	0
AIRCRAFT TYPE *B*	0	0	0	0	0
AIRCRAFT TYPE *C*	0	0	4	8	12
AIRCRAFT TYPE *D+F*	100	100	96	92	88
HOURLY CAPACITY VFR	85	92	99	99	99
HOURLY CAPACITY IFR	0	52	52	52	52
ANNUAL CAPACITY(000)	118	128	138	138	141

DEVELOPMENT COST SUMMARY

PLAN PERIOD	PARTICIPATION	LAND SIDE	AIR SIDE	TOTAL
BEFORE 1977	FEDERAL	$	$ 13,000	$ 13,000
	STATE/LOCAL		3,000	3,000
	TOTAL		16,000	16,000
1977	FEDERAL	7,000		7,000
	STATE/LOCAL	21,000		21,000
	TOTAL	28,000		28,000
1982	FEDERAL	2,000		2,000
	STATE/LOCAL	2,000		2,000
	TOTAL	4,000		4,000
1987	FEDERAL	1,000	59,000	60,000
	STATE/LOCAL	2,000	15,000	17,000
	TOTAL	3,000	74,000	77,000
1992	FEDERAL	1,000	76,000	77,000
	STATE/LOCAL	2,000	20,000	22,000
	TOTAL	3,000	96,000	99,000
TOTAL COSTS TO 1992	FEDERAL	11,000	148,000	159,000
	STATE/LOCAL	27,000	38,000	65,000
	TOTAL	38,000	186,000	224,000

PLENTYWOOD

AIRPORT LAYOUT



MSASP AIRFIELD DEVELOPMENT COSTS IN THOUSANDS OF 1972 DOLLARS

PLENTYWOOD

	FED SHARE	TOTAL	FED GRANTS	STATE/LOCAL
BEFORE 1977				
1 EXTENO RUNWAY				
A EARTHWORK	79.46	1.80	1.43	0.36
B SITE PREPARATION	79.46	0.60	0.47	0.12
C PAVING	79.46	6.67	5.29	1.37
D LIGHTING MIRL	79.46	7.00	5.56	1.43
TOTAL ($000)		16.09	12.78	3.32
1987				
2 OVERLAY RUNWAY (12-30)	79.46	74.25	58.99	15.25
TOTAL ($000)		74.25	59.00	15.25
1992				
1 EXTENO RUNWAY				
A EARTHWORK	79.46	6.60	5.24	1.35
B SITE PREPARATION	79.46	7.56	6.00	1.55
C PAVING	79.46	73.40	58.32	15.07
D LIGHTING (MIRL)	79.46	7.70	6.11	1.58
E LAND ACQUISITION	79.46	0.00	0.00	0.00
TOTAL ($000)		95.28	75.71	19.59
TOTAL PROJECT COSTS		185.62	147.51	38.16

DESIGN SCHEDULE

FEDERAL SHARE OF THE PROJECT COSTS

	FED SHARE	1977	1982	1987	1992
1 GA TERMINAL BUILDING AREA(SF)	0.00	0.	0.	0.	0.
2 GA AIRCRAFT LOADING POSITIONS(NUMBER)	0.00	0.	0.	0.	0.
3 GA AC LOADING & BYPASS APRON AREA(SY)	79.46	0.	0.	0.	0.
4 ITINERANT AIRCRAFT PARKING AREA(SY)	79.46	0.	1049.	0.	0.
5 GA BASED AIRCRAFT TIE-DOWN AREA(SY)	79.46	5390.	834.	834.	834.
6 GA CONV HANGAR BLDG AND APRON AREA(SY)	79.46	0.	0.	0.	0.
7 GA *T* HANGAR BLDG & APRON AREA(SY)	79.46	0.	0.	0.	0.
8 GA PUBLIC VEHICULAR PARKING SPACE(NO.)	0.00	0.	0.	0.	0.
9 GA PUBLIC VEHICULAR PARKING AREA(SY)	0.00	0.	0.	0.	0.
10 AIRPORT MAINTENANCE APRON AREA(SY)	79.46	1620.	33.	30.	114.
11 AIRPORT MAINTENANCE BUILDING(SF)	0.00	0.	0.	0.	0.
TOTAL IN THOUSANDS OF DOLLARS		7.0	1.9	0.9	1.0

LANDSIDE

PROJECT COST LESS FEDERAL GRANTS

	FED SHARE	1977	1982	1987	1992
1 GA TERMINAL BUILDING AREA(SF)	0.00	6820.	810.	810.	810.
2 GA AIRCRAFT LOADING POSITIONS(NUMBER)	0.00	0.	0.	0.	0.
3 GA AC LOADING & BYPASS APRON AREA(SY)	79.46	0.	0.	0.	0.
4 ITINERANT AIRCRAFT PARKING AREA(SY)	79.46	0.	271.	0.	0.
5 GA BASED AIRCRAFT TIE-DOWN AREA(SY)	79.46	1393.	215.	215.	215.
6 GA CONV HANGAR BLDG AND APRON AREA(SY)	79.46	0.	0.	0.	0.
7 GA *T* HANGAR BLDG & APRON AREA(SY)	79.46	0.	0.	0.	0.
8 GA PUBLIC VEHICULAR PARKING SPACE(NO.)	0.00	0.	0.	0.	0.
9 GA PUBLIC VEHICULAR PARKING AREA(SY)	0.00	11966.	748.	748.	748.
10 AIRPORT MAINTENANCE APRON AREA(SY)	79.46	418.	8.	7.	29.
11 AIRPORT MAINTENANCE BUILDING(SF)	0.00	567.	12.	11.	40.
TOTAL IN THOUSANDS OF DOLLARS		21.2	2.1	1.8	1.8

POLSON - NEW

Polson is situated within the Flathead Indian Reservation and on the south end of the Flathead Lake in western Montana. U. S. 93 and State Route 35 provide access to the north and south.

The airport is one mile northwest of the city across the Flathead River on U. S. 93. Type 'C' aircraft are present utilizing this facility. Since expansion space is limited, it is recommended that a site selection study be made without delay.

Facility Requirements

A completely new general aviation airport will be required by 1977. This facility should have the capability to accommodate small business jets.

Name: POLSON

Site Number: 12474

County: LAKE

District: 10

PEAK HOUR IFR AND VFR DEMAND FORECASTS

	1977	1982	1987	1992
POLSON MONTANA				
TOTAL PEAK HOUR VFR DEMAND	31.	35.	38.	42.
GA IFR PEAK HOUR DEMAND	2.	2.	3.	5.

OPERATIONAL DATA

DEMAND FORECAST INDICATORS

	1977	1982	1987	1992
1 TOTAL GA ANNUAL OPERATIONS	15670.0	18000.0	19060.0	21560.0
2 GA PEAK HOUR OPERATIONS	31.0	35.0	38.0	42.0
3 PERCENT GA ITINERANT OPERATIONS	30.0	30.0	32.0	32.0
4 BASED AIRCRAFT UNDER 12500 LBS	25.0	28.0	31.0	35.0
5 PASED AIRCRAFT OVER 12500 LBS	1.0	1.0	1.0	1.0

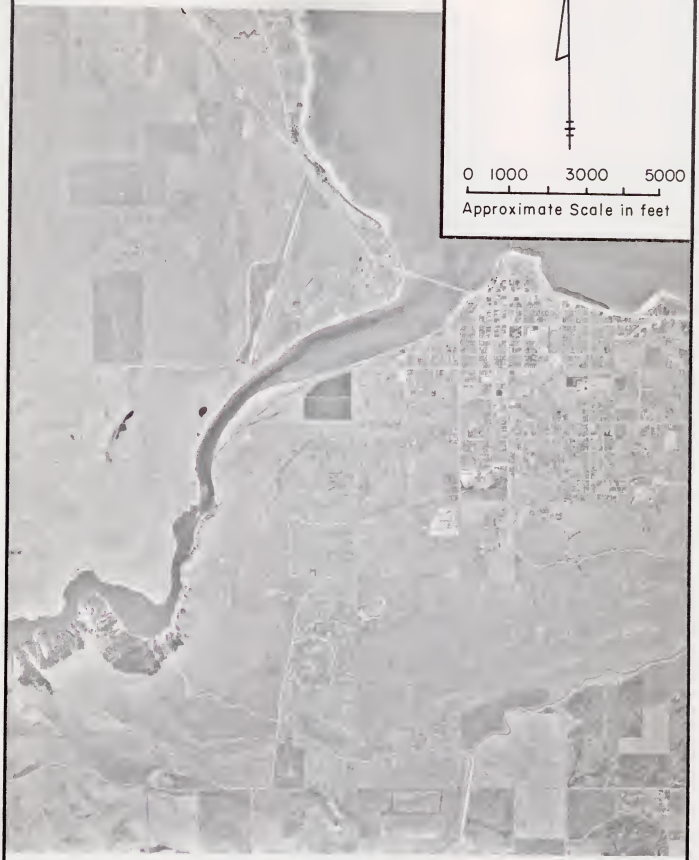
AIRCRAFT MIX AND CAPACITY FORECASTS

	1972	1977	1982	1987	1992
AIRCRAFT TYPE *A*	0	0	0	0	0
AIRCRAFT TYPE *B*	0	0	0	0	0
AIRCRAFT TYPE *C*	0	0	2	5	10
AIRCRAFT TYPE *D+E*	100	100	98	95	90
HOURLY CAPACITY VFR	83	91	99	99	99
HOURLY CAPACITY IFR	0	0	0	0	0
ANNUAL CAPACITY(000)	115	126	138	138	138

DEVELOPMENT COST SUMMARY

PLAN PERIOD	PARTICIPATION	LAND SIDE	AIR SIDE	TOTAL
BEFORE 1977	FEDERAL	$	$ 70,000	$ 70,000
	STATE/LOCAL		28,000	28,000
	TOTAL		98,000	98,000
1977	FEDERAL	14,000	401,000	415,000
	STATE/LOCAL	50,000	109,000	159,000
	TOTAL	64,000	510,000	574,000
1982	FEDERAL	2,000		2,000
	STATE/LOCAL	7,000		7,000
	TOTAL	9,000		9,000
1987	FEDERAL	1,000		1,000
	STATE/LOCAL	5,000		5,000
	TOTAL	6,000		6,000
1992	FEDERAL	3,000		3,000
	STATE/LOCAL	16,000		16,000
	TOTAL	19,000		19,000
TOTAL COSTS TO 1992	FEDERAL	20,000	471,000	491,000
	STATE/LOCAL	78,000	137,000	215,000
	TOTAL	98,000	608,000	706,000

POLSON



MSASP AIRFIELD DEVELOPMENT COSTS IN THOUSANDS OF 1972 DOLLARS

POLSON=NEW

AIRSIDE

		FED SHARE	TOTAL	FED GRANTS	STATE/LOCAL
	BEFORE 1977				
1	LAND ACQUISITION	79.46	30.00	23.83	6.16
2	SITE PREPARATION	79.46	50.00	39.72	10.27
3	ACCESS ROAD, UNPAVED	0.00	10.00	0.00	10.00
4	NDB	79.46	8.00	6.35	1.64
	TOTAL ($000)		98.01	69.94	28.09
	1977				
5	GRADE AND DRAIN	79.46	45.00	35.75	9.24
6	PAVE/LIGHT RW,T/W,APRN	79.46	450.00	357.57	92.43
7	AUTO PARKING	79.46	10.00	7.94	2.05
8	UTILITIES	0.00	5.00	0.00	5.00
	TOTAL ($000)		510.01	401.29	108.74
	TOTAL PROJECT COSTS		608.03	471.23	136.84

LANDSIDE

FEDERAL SHARE OF THE PROJECT COSTS

		FED SHARE	1977	1982	1987	1992
1	GA TERMINAL BUILDING AREA(SF)	0.00	0.	0.	0.	0.
2	GA AIRCRAFT LOADING POSITIONS(NUMBER)	0.00	0.	0.	0.	0.
3	GA AC LOADING & BYPASS APRON AREA(SY)	79.46	0.	0.	0.	0.
4	ITINERANT AIRCRAFT PARKING AREA(SY)	79.46	0.	0.	0.	882.
5	GA BASED AIRCRAFT TIE-DOWN AREA(SY)	79.46	11504.	1251.	1251.	1669.
6	GA CONV HANGAR BLDG AND APRON AREA(SY)	79.46	0.	0.	0.	0.
7	GA *T* HANGAR BLDG & APRON AREA(SY)	79.46	0.	0.	0.	0.
8	GA PUBLIC VEHICULAR PARKING SPACE(NO.)	0.00	0.	0.	0.	0.
9	GA PUBLIC VEHICULAR PARKING AREA(SY)	0.00	0.	0.	0.	0.
10	AIRPORT MAINTENANCE APRON AREA(SY)	79.46	2241.	333.	152.	357.
11	AIRPORT MAINTENANCE BUILDING(SF)	0.00	0.	0.	0.	0.
	TOTAL IN THOUSANDS OF DOLLARS		13.7	1.6	1.4	2.9

PROJECT COST LESS FEDERAL GRANTS

		FED SHARE	1977	1982	1987	1992
1	GA TERMINAL BUILDING AREA(SF)	0.00	23610.	3240.	2430.	11800.
2	GA AIRCRAFT LOADING POSITIONS(NUMBER)	0.00	0.	0.	0.	0.
3	GA AC LOADING & BYPASS APRON AREA(SY)	79.46	0.	0.	0.	0.
4	ITINERANT AIRCRAFT PARKING AREA(SY)	79.46	0.	0.	0.	228.
5	GA BASED AIRCRAFT TIE-DOWN AREA(SY)	79.46	2973.	323.	323.	431.
6	GA CONV HANGAR BLDG AND APRON AREA(SY)	79.46	0.	0.	0.	0.
7	GA *T* HANGAR BLDG & APRON AREA(SY)	79.46	0.	0.	0.	0.
8	GA PUBLIC VEHICULAR PARKING SPACE(NO.)	0.00	0.	0.	0.	0.
9	GA PUBLIC VEHICULAR PARKING AREA(SY)	0.00	21852.	2994.	2245.	2994.
10	AIRPORT MAINTENANCE APRON AREA(SY)	79.46	579.	86.	39.	92.
11	AIRPORT MAINTENANCE BUILDING(SF)	0.00	784.	116.	53.	125.
	TOTAL IN THOUSANDS OF DOLLARS		49.8	6.8	5.1	15.7

MSASP AIRFIELD DEVELOPMENT COSTS IN THOUSANDS OF 1972 DOLLARS

POLSON-NEW

AIRSIDE

		FED SHARE	TOTAL	FED GRANTS	STATE/LOCAL
	BEFORE 1977				
1	LAND ACQUISITION	79.46	30.00	23.83	6.16
2	SITE PREPARATION	79.46	50.00	39.72	10.27
3	ACCESS ROAD, UNPAVED	0.00	10.00	0.00	10.00
4	NDB	79.46	8.00	6.35	1.64
	TOTAL ($000)		98.01	69.94	28.09
	1977				
5	GRADE AND DRAIN	79.46	45.00	35.75	9.24
6	PAVE/LIGHT RW,TW,APRN	79.46	450.00	357.57	92.43
7	AUTO PARKING	79.46	10.00	7.94	2.05
8	UTILITIES	0.00	5.00	0.00	5.00
	TOTAL ($000)		510.01	401.29	108.74
	TOTAL PROJECT COSTS		608.03	471.23	136.84

LANDSIDE

FEDERAL SHARE OF THE PROJECT COSTS

		FED SHARE	1977	1982	1987	1992
1	GA TERMINAL BUILDING AREA(SF)	0.00	0.	0.	0.	0.
2	GA AIRCRAFT LOADING POSITIONS(NUMBER)	0.00	0.	0.	0.	0.
3	GA AC LOADING & BYPASS APRON AREA(SY)	79.46	0.	0.	0.	0.
4	ITINERANT AIRCRAFT PARKING AREA(SY)	79.46	0.	0.	0.	882.
5	GA BASED AIRCRAFT TIE-DOWN AREA(SY)	79.46	11504.	1251.	1251.	1669.
6	GA CONV HANGAR BLDG AND APRON AREA(SY)	79.46	0.	0.	0.	0.
7	GA *T* HANGAR BLDG & APRON AREA(SY)	79.46	0.	0.	0.	0.
8	GA PUBLIC VEHICULAR PARKING SPACE(NO.)	0.00	0.	0.	0.	0.
9	GA PUBLIC VEHICULAR PARKIMG AREA(SY)	0.00	0.	0.	0.	0.
10	AIRPORT MAINTENANCE APRON AREA(SY)	79.46	2241.	333.	152.	357.
11	AIRPORT MAINTENANCE BUILDING(SF)	0.00	0.	0.	0.	0.
	TOTAL IN THOUSANDS OF DOLLARS		13.7	1.6	1.4	2.9

PROJECT COST LESS FEDERAL GRANTS

		FED SHARE	1977	1982	1987	1992
1	GA TERMINAL BUILDING AREA(SF)	0.00	23610.	3240.	2430.	11800.
2	GA AIRCRAFT LOADING POSITIONS(NUMBER)	0.00	0.	0.	0.	0.
3	GA AC LOADING & BYPASS APRON AREA(SY)	79.46	0.	0.	0.	0.
4	ITINERANT AIRCRAFT PARKING AREA(SY)	79.46	0.	0.	0.	228.
5	GA BASED AIRCRAFT TIE-DOWN AREA(SY)	79.46	2973.	323.	323.	431.
6	GA CONV HANGAR BLDG AND APRON AREA(SY)	79.46	0.	0.	0.	0.
7	GA *T* HANGAR BLDG & APRON AREA(SY)	79.46	0.	0.	0.	0.
8	GA PUBLIC VEHICULAR PARKING SPACE(NO.)	0.00	0.	0.	0.	0.
9	GA PUBLIC VEHICULAR PARKIMG AREA(SY)	0.00	21852.	2994.	2245.	2994.
10	AIRPORT MAINTENANCE APRON AREA(SY)	79.46	579.	86.	39.	92.
11	AIRPORT MAINTENANCE BUILDING(SF)	0.00	784.	116.	53.	125.
	TOTAL IN THOUSANDS OF DOLLARS		49.8	6.8	5.1	15.7

POPLAR

The town of Poplar is situated by the Missouri River within the Fort Peck Indian Reservation in east Montna. U. S. 2 passes east-west through the town. Wolf Point is 21 miles west of Poplar.

The airport is northeast of town off U. S. 2. Existing and future operations will be type 'D & E' aircraft.

Facility Requirements

A small amount of land side expansion is necessary in 1977. The air side addition will be a runway extension before 1977.

NAVAIDS: An NDB should be installed by 1982 to accommodate the IFR traffic demand.

Name: POPLAR

Site Number:. 12478

County:. ROOSEVELT

Oistrict:. 1

PEAK HOUR IFR AND VFR DEMAND FORECASTS

	1977	1982	1987	1992
POPLAR MONTANA				
TOTAL PEAK HOUR VFR DEMAND	8.	9.	10.	11.
GA IFR PEAK HOUR DEMAND	0.	1.	1.	1.

OPERATIONAL DATA

DEMAND FORECAST INDICATORS	1977	1982	1987	1992
1 TOTAL GA ANNUAL OPERATIONS	3670.0	4090.0	4570.0	5000.0
2 GA PEAK HOUR OPERATIONS	8.0	9.0	10.0	11.0
3 PERCENT GA ITINERANT OPERATIONS	30.0	30.0	30.0	30.0
4 BASED AIRCRAFT UNDER 12500 LBS	5.0	6.0	7.0	8.0
5 BASED AIRCRAFT OVER 12500 LBS	0.0	0.0	0.0	0.0

AIRCRAFT MIX AND CAPACITY FORECASTS

	1972	1977	1982	1987	1992
AIRCRAFT TYPE *A*	0	0	0	0	0
AIRCRAFT TYPE *B*	0	0	0	0	0
AIRCRAFT TYPE *C*	0	0	0	0	0
AIRCRAFT TYPE *D+E*	100	100	100	100	100
HOURLY CAPACITY VFR	85	92	99	99	99
HOURLY CAPACITY IFR	0	0	0	0	0
ANNUAL CAPACITY(000)	118	128	138	138	138

DEVELOPMENT COST SUMMARY

PLAN PERIOD	PARTICIPATION	LAND SIDE	AIR SIDE	TOTAL
BEFORE 1977	FEDERAL	$	$ 13,000	$ 13,000
	STATE/LOCAL		3,000	3,000
	TOTAL		16,000	16,000
1977	FEDERAL	3,000		3,000
	STATE/LOCAL	5,000		5,000
	TOTAL	8,000		8,000
1982	FEDERAL	1,000	6,000	7,000
	STATE/LOCAL	1,000	2,000	3,000
	TOTAL	2,000	8,000	10,000
1987	FEDERAL	1,000		1,000
	STATE/LOCAL	1,000		1,000
	TOTAL	2,000		2,000
1992	FEDERAL	1,000		1,000
	STATE/LOCAL	1,000		1,000
	TOTAL	2,000		2,000
TOTAL COSTS TO 1992	FEDERAL	6,000	19,000	25,000
	STATE/LOCAL	8,000	5,000	13,000
	TOTAL	14,000	24,000	38,000

POPLAR

AIRSIDE

MSASP AIRFIELD DEVELOPMENT COSTS IN THOUSANDS OF 1972 DOLLARS

POPLAR

	FED SHARE	TOTAL	FED GRANTS	STATE/LOCAL
BEFORE 1977				
1 EXTEND RUNWAY (6-27)				
A EARTHWORK	79.46	2.40	1.90	0.49
B EASEMENTS	79.46	0.14	0.11	0.02
F LIGHTING (MIRL)	79.46	0.52	0.41	0.10
D PAVING	79.46	13.00	10.32	2.67
TOTAL ($000)		16.08	12.78	3.31
1982				
2 NDB	79.46	8.00	6.35	1.64
TOTAL ($000)		8.00	6.36	1.64
TOTAL PROJECT COSTS		24.08	19.14	4.96

LANDSIDE

FEDERAL SHARE OF THE PROJECT COSTS

	FED SHARE	1977	1982	1987	1992
1 GA TERMINAL BUILDING AREA(SF)	0.00	0.	0.	0.	0.
2 GA AIRCRAFT LOADING POSITIONS(NUMBER)	0.00	0.	0.	0.	0.
3 GA AC LOADING & BYPASS APRON AREA(SY)	79.46	0.	0.	0.	0.
4 ITINERANT AIRCRAFT PARKING AREA(SY)	79.46	0.	0.	0.	0.
5 GA BASED AIRCRAFT TIE-DOWN AREA(SY)	79.46	2088.	417.	417.	417.
6 GA CONV HANGAR BLDG AND APRON AREA(SY)	79.46	810.	162.	162.	162.
7 GA *T* HANGAR BLDG & APRON AREA(SY)	79.46	0.	0.	0.	0.
8 GA PUBLIC VEHICULAR PARKING SPACE(NO.)	0.00	0.	0.	0.	0.
9 GA PUBLIC VEHICULAR PARKING AREA(SY)	0.00	0.	0.	0.	0.
10 AIRPORT MAINTENANCE APRON AREA(SY)	79.46	525.	60.	83.	47.
11 AIRPORT MAINTENANCE BUILDING(SF)	0.00	0.	0.	0.	0.
TOTAL IN THOUSANDS OF DOLLARS		3.4	0.6	0.7	0.6

PROJECT COST LESS FEDERAL GRANTS

	FED SHARE	1977	1982	1987	1992
1 GA TERMINAL BUILDING AREA(SF)	0.00	0.	0.	0.	0.
2 GA AIRCRAFT LOADING POSITIONS(NUMBER)	0.00	0.	0.	0.	0.
3 GA AC LOADING & BYPASS APRON AREA(SY)	79.46	0.	0.	0.	0.
4 ITINERANT AIRCRAFT PARKING AREA(SY)	79.46	0.	0.	0.	0.
5 GA BASED AIRCRAFT TIE-DOWN AREA(SY)	79.46	539.	107.	107.	107.
6 GA CONV HANGAR BLDG AND APRON AREA(SY)	79.46	1229.	246.	246.	246.
7 GA *T* HANGAR BLDG & APRON AREA(SY)	79.46	0.	0.	0.	0.
8 GA PUBLIC VEHICULAR PARKING SPACE(NO.)	0.00	0.	0.	0.	0.
9 GA PUBLIC VEHICULAR PARKING AREA(SY)	0.00	2388.	748.	748.	748.
10 AIRPORT MAINTENANCE APRON AREA(SY)	79.46	135.	15.	21.	12.
11 AIRPORT MAINTENANCE BUILDING(SF)	0.00	184.	21.	29.	16.
TOTAL IN THOUSANDS OF DOLLARS		4.5	1.1	1.2	1.1

RED LODGE

Red Lodge is in southern Montana just east of the Custer National Forest and 60 miles southwest of Billings on U. S. 212. Yellowstone National Park is within 40 miles to the southwest.

The airport is located on the west side of town. Type 'C' aircraft activity is expected to begin in 1982. The increase in activity might present a small environmental problem to the southwestern portion of Red Lodge. Restrictive zoning should be considered to insure community developments compatible with the airport.

Facility Requirements

Terminal building area and public vehicular parking area are large cost land side items in 1977. Air side additions will consist of a runway extension before 1977 and a runway overlay in 1992.

Name: RED LODGE

Site Number: 12483

County: CARBON

District: 7

PEAK HOUR IFR AND VFR DEMAND FORECASTS

	1977	1982	1987	1992
RED LODGE,MONTANA				
TOTAL PEAK HOUR VFR DEMAND	15.	17.	18.	20.
GA IFR PEAK HOUR DEMAND	1.	1.	2.	2.

OPERATIONAL DATA

DEMAND FORECAST INDICATORS

	1977	1982	1987	1992
1 TOTAL GA ANNUAL OPERATIONS	6670.0	7580.0	8180.0	9090.0
2 GA PEAK HOUR OPERATIONS	15.0	17.0	18.0	20.0
3 PERCENT GA ITINERANT OPERATIONS	33.0	33.0	33.0	33.0
4 BASED AIRCRAFT UNDER 12500 LBS	10.0	11.0	12.0	13.0
5 BASED AIRCRAFT OVER 12500 LBS	0.0	0.0	0.0	0.0

AIRCRAFT MIX AND CAPACITY FORECASTS

	1972	1977	1982	1987	1992
AIRCRAFT TYPE *A*	0	0	0	0	0
AIRCRAFT TYPE *B*	0	0	0	0	0
AIRCRAFT TYPE *C*	0	0	2	4	6
AIRCRAFT TYPE *D+E+*	100	100	98	96	94
HOURLY CAPACITY VFR	77	88	99	99	99
HOURLY CAPACITY IFR	0	0	0	0	0
ANNUAL CAPACITY(000)	107	122	138	138	138

DEVELOPMENT COST SUMMARY

PLAN PERIOD	PARTICIPATION	LAND SIDE	AIR SIDE	TOTAL
BEFORE 1977	FEDERAL	$	$ 63,000	$ 63,000
	STATE/LOCAL		16,000	16,000
	TOTAL		79,000	79,000
1977	FEDERAL	5,000		5,000
	STATE/LOCAL	21,000		21,000
	TOTAL	26,000		26,000
1982	FEDERAL	1,000		1,000
	STATE/LOCAL	3,000		3,000
	TOTAL	4,000		4,000
1987	FEDERAL	1,000		1,000
	STATE/LOCAL	2,000		2,000
	TOTAL	3,000		3,000
1992	FEDERAL	1,000	119,000	120,000
	STATE/LOCAL	3,000	31,000	34,000
	TOTAL	4,000	150,000	154,000
TOTAL COSTS TO 1992	FEDERAL	8,000	182,000	190,000
	STATE/LOCAL	29,000	47,000	76,000
	TOTAL	37,000	229,000	266,000

RED LODGE

MSASP AIRFIELD DEVELOPMENT COSTS IN THOUSANDS OF 1972 DOLLARS

RED LODGE

AIRSIDE

	FED SHARE	TOTAL	FED GRANTS	STATE/LOCAL
BEFORE 1977				
1 EXTEND RUNWAY(16-34)	79.46	8.40	6.67	1.72
A EARTH WORK	79.46	2.00	1.58	0.41
B LAND ACQUISITION	79.46	0.28	0.22	0.05
C EASEMENTS	79.46	1.80	1.43	0.36
D DRAINAGE	79.46	26.70	21.21	5.48
E PAVING	79.46	40.00	31.78	8.21
2 MIRL				
TOTAL ($000)		79.20	62.94	16.29
1992				
3 OVERLAY RUNWAY(16/34)	79.46	150.00	119.18	30.81
TOTAL ($000)		150.00	119.19	30.81
TOTAL PROJECT COSTS		229.21	182.14	47.10

LANDSIDE

FEDERAL SHARE OF THE PROJECT COSTS

	FED SHARE	1977	1982	1987	1992
1 GA TERMINAL BUILDING AREA(SF)	0.00	0.	0.	0.	0.
2 GA AIRCRAFT LOADING POSITIONS(NUMBER)	0.00	0.	0.	0.	0.
3 GA AC LOADING & BYPASS APRON AREA(SY)	79.46	0.	0.	0.	0.
4 ITINERANT AIRCRAFT PARKING AREA(SY)	79.46	0.	0.	0.	0.
5 GA BASED AIRCRAFT TIE-DOWN AREA(SY)	79.46	4174.	417.	417.	417.
6 GA CONV HANGAR BLDG AND APRON AREA(SY)	79.46	0.	0.	0.	0.
7 GA *T* HANGAR BLDG & APRON AREA(SY)	79.46	0.	0.	0.	0.
8 GA PUBLIC VEHICULAR PARKING SPACE(NO.)	0.00	0.	0.	0.	0.
9 GA PUBLIC VEHICULAR PARKING AREA(SY)	0.00	0.	0.	0.	0.
10 AIRPORT MAINTENANCE APRON AREA(SY)	79.46	310.	130.	86.	130.
11 AIRPORT MAINTENANCE BUILDING(SF)	0.00	0.	0.	0.	0.
TOTAL IN THOUSANDS OF DOLLARS		4.5	0.5	0.5	0.5

PROJECT COST LESS FEDERAL GRANTS

	FED SHARE	1977	1982	1987	1992
1 GA TERMINAL BUILDING AREA(SF)	0.00	10650.	1620.	810.	1620.
2 GA AIRCRAFT LOADING POSITIONS(NUMBER)	0.00	0.	0.	0.	0.
3 GA AC LOADING & BYPASS APRON AREA(SY)	79.46	0.	0.	0.	0.
4 ITINERANT AIRCRAFT PARKING AREA(SY)	79.46	0.	0.	0.	0.
5 GA BASED AIRCRAFT TIE-DOWN AREA(SY)	79.46	1079.	107.	107.	107.
6 GA CONV HANGAR BLDG AND APRON AREA(SY)	79.46	0.	0.	0.	0.
7 GA *T* HANGAR BLDG & APRON AREA(SY)	79.46	0.	0.	0.	0.
8 GA PUBLIC VEHICULAR PARKING SPACE(NO.)	0.00	0.	0.	0.	0.
9 GA PUBLIC VEHICULAR PARKING AREA(SY)	0.00	9427.	1497.	748.	1497.
10 AIRPORT MAINTENANCE APRON AREA(SY)	79.46	80.	33.	22.	33.
11 AIRPORT MAINTENANCE BUILDING(SF)	0.00	0.	0.	0.	0.
TOTAL IN THOUSANDS OF DOLLARS		21.2	3.3	1.7	3.3

RONAN

The town of Ronan is situated in western Montana within the Flathead Indian Reservation, 12 miles south of Polson on U. S. 93.

The airport is located three miles north of town just off U. S. 93. Only light private aircraft (D & E) are expected.

Facility Requirements

A small amount of land side work should be completed in 1977. The air side expansion will consist of a runway extension before 1977.

NAVAIDS: The NDB at Polson can be utilized to accommodate the forecasted IFR demand at Ronan.

Name: RONAN

Site Number: 12485

County: LAKE

Oistrict:. 10

PEAK HOUR IFR AND VFR DEMAND FORECASTS

	1977	1982	1987	1992
RONAN, MONTANA				
TOTAL PEAK HOUR VFR DEMAND	4.	5.	6.	7.
GA IFR PEAK HOUR DEMAND	0.	0.	1.	1.

OPERATIONAL DATA

DEMAND FORECAST INDICATORS

	1977	1982	1987	1992
1 TOTAL GA ANNUAL OPERATIONS	200.0	233.0	267.0	300.0
2 GA PEAK HOUR OPERATIONS	4.0	5.0	6.0	7.0
3 PERCENT GA ITINERANT OPERATIONS	30.0	30.0	30.0	30.0
4 BASED AIRCRAFT UNDER 12500 LBS	5.0	5.0	6.0	6.0
5 BASED AIRCRAFT OVER 12500 LBS	0.0	0.0	0.0	0.0

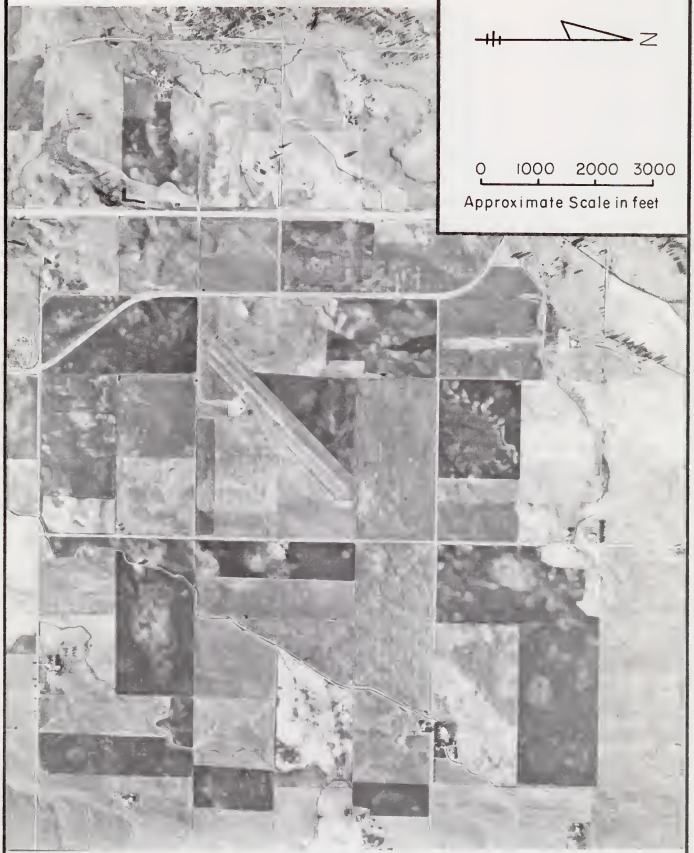
AIRCRAFT MIX AND CAPACITY FORECASTS

	1972	1977	1982	1987	1992
AIRCRAFT TYPE *A*	0	0	0	0	0
AIRCRAFT TYPE *B*	0	0	0	0	0
AIRCRAFT TYPE *C*	0	0	0	0	0
AIRCRAFT TYPE *D+E*	100	100	100	100	100
HOURLY CAPACITY VFR	77	88	99	99	99
HOURLY CAPACITY IFR	0	0	0	0	0
ANNUAL CAPACITY(000)	107	122	138	138	138

DEVELOPMENT COST SUMMARY

PLAN PERIOD	PARTICIPATION	LAND SIDE	AIR SIDE	TOTAL
BEFORE 1977	FEDERAL	$	$	$
	STATE/LOCAL		9,000	9,000
	TOTAL		9,000	9,000
1977	FEDERAL			
	STATE/LOCAL	10,000		10,000
	TOTAL	10,000		10,000
1982	FEDERAL			
	STATE/LOCAL	1,000		1,000
	TOTAL	1,000		1,000
1987	FEDERAL			
	STATE/LOCAL	2,000		2,000
	TOTAL	2,000		2,000
1992	FEDERAL			
	STATE/LOCAL	1,000		1,000
	TOTAL	1,000		1,000
TOTAL COSTS TO 1992	FEDERAL			
	STATE/LOCAL	14,000	9,000	23,000
	TOTAL	14,000	9,000	23,000

RONAN



MSASP AIRFIELD DEVELOPMENT COSTS IN THOUSANDS OF 1972 DOLLARS

RONAN

AIRSIDE

	FED SHARE	TOTAL	FED GRANTS	STATE/LOCAL
BEFORE 1977				
1 EXTEND RUNWAY (3-21)				
A EARTH WORK	0.00	4.50	0.00	4.50
B EASEMENTS	0.00	0.40	0.00	0.40
C SITE PREPARATION	0.00	0.24	0.00	0.24
D OBSTRUCTIONS	0.00	1.30	0.00	1.30
E DRAINAGE	0.00	2.25	0.00	2.25
TOTAL ($000)		8.71	0.02	8.71
TOTAL PROJECT COSTS		8.71	0.02	8.71

LANDSIDE

FEDERAL SHARE OF THE PROJECT COSTS

	FED SHARE	1977	1982	1987	1992
1 GA TERMINAL BUILDING AREA(SF)	0.00	0.	0.	0.	0.
2 GA AIRCRAFT LOADING POSITIONS(NUMBER)	0.00	0.	0.	0.	0.
3 GA AC LOADING & BYPASS APRON AREA(SY)	0.00	0.	0.	0.	0.
4 ITINERANT AIRCRAFT PARKING AREA(SY)	0.00	0.	0.	0.	0.
5 GA BASED AIRCRAFT TIE-DOWN AREA(SY)	0.00	0.	0.	0.	0.
6 GA CONV HANGAR BLDG AND APRON AREA(SY)	0.00	0.	0.	0.	0.
7 GA *T* HANGAR BLDG & APRON AREA(SY)	0.00	0.	0.	0.	0.
8 GA PUBLIC VEHICULAR PARKING SPACE(NO.)	0.00	0.	0.	0.	0.
9 GA PUBLIC VEHICULAR PARKING AREA(SY)	0.00	0.	0.	0.	0.
10 AIRPORT MAINTENANCE APRON AREA(SY)	0.00	0.	0.	0.	0.
11 AIRPORT MAINTENANCE BUILDING(SF)	0.00	0.	0.	0.	0.
TOTAL IN THOUSANDS OF DOLLARS		0.0	0.0	0.0	0.0

PROJECT COST LESS FEDERAL GRANTS

	FED SHARE	1977	1982	1987	1992
1 GA TERMINAL BUILDING AREA(SF)	0.00	0.	0.	0.	0.
2 GA AIRCRAFT LOADING POSITIONS(NUMBER)	0.00	0.	0.	0.	0.
3 GA AC LOADING & BYPASS APRON AREA(SY)	0.00	1020.	0.	0.	0.
4 ITINERANT AIRCRAFT PARKING AREA(SY)	0.00	0.	0.	0.	0.
5 GA BASED AIRCRAFT TIE-DOWN AREA(SY)	0.00	2628.	0.	525.	0.
6 GA CONV HANGAR BLDG AND APRON AREA(SY)	0.00	0.	0.	0.	0.
7 GA *T* HANGAR BLDG & APRON AREA(SY)	0.00	3039.	0.	608.	0.
8 GA PUBLIC VEHICULAR PARKING SPACE(NO.)	0.00	0.	0.	0.	0.
9 GA PUBLIC VEHICULAR PARKING AREA(SY)	0.00	2994.	748.	748.	748.
10 AIRPORT MAINTENANCE APRON AREA(SY)	0.00	36.	6.	6.	6.
11 AIRPORT MAINTENANCE BUILDING(SF)	0.00	10.	2.	2.	2.
TOTAL IN THOUSANDS OF DOLLARS		9.7	0.8	1.9	0.8

ROUNDUP

Roundup is situated in the wheat growing area of south central Montana, 10 miles north of the Bull Mountains. The town is served by U. S. 12 to the east and west, and U. S. 87 to the north. Billings is 45 miles south.

The airport is two miles north of town off U. S. 87. Some 'C' type aircraft activity is expected by 1982 and possibly sooner if the expected wood pulp plant is developed in Roundup in the immediate future.

Facility Requirements

A moderate amount of land side additions should be made in 1977. Air side expansion includes a runway extension and reconstruction before 1977. Before this costly runway reconstruction/extension is begun, a detailed master plan and/or site feasibility study should be completed.

Name: ROUNDUP

Site Number:. 12489

County:. MUSSELSHELL

District:. 6

PEAK HOUR IFR AND VFR DEMAND FORECASTS

	1977	1982	1987	1992
ROUNDUP MONTANA				
TOTAL PEAK HOUR VFR DEMAND	13.	14.	16.	18.
GA IFR PEAK HOUR DEMAND	1.	1.	1.	2.

OPERATIONAL DATA

DEMAND FORECAST INDICATORS	1977	1982	1987	1992
1 TOTAL GA ANNUAL OPERATIONS	6000.0	6560.0	7060.0	8000.0
2 GA PEAK HOUR OPERATIONS	13.0	14.0	16.0	18.0
3 PERCENT GA ITINERANT OPERATIONS	30.0	32.0	34.0	35.0
4 BASED AIRCRAFT UNDER 12500 LBS	9.0	10.0	11.0	12.0
5 BASED AIRCRAFT OVER 12500 LBS	0.0	0.0	0.0	0.0

AIRCRAFT MIX AND CAPACITY FORECASTS

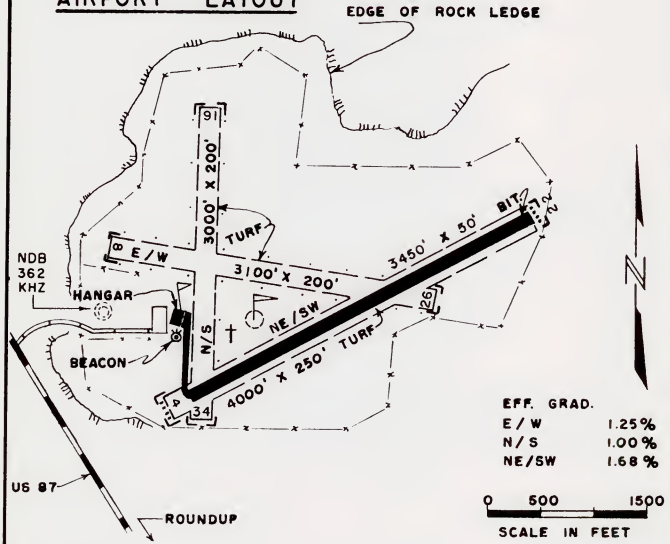
	1972	1977	1982	1987	1992
AIRCRAFT TYPE *A*	0	0	0	0	0
AIRCRAFT TYPE *B*	0	0	0	0	0
AIRCRAFT TYPE *C*	0	0	2	4	6
AIRCRAFT TYPE *D+F*	100	100	98	96	94
HOURLY CAPACITY VFR	77	88	99	99	99
HOURLY CAPACITY IFR	0	52	52	52	52
ANNUAL CAPACITY(000)	107	122	138	138	138

DEVELOPMENT COST SUMMARY

PLAN PERIOD	PARTICIPATION	LAND SIDE	AIR SIDE	TOTAL
BEFORE 1977	FEDERAL	$	$ 265,000	$ 265,000
	STATE/LOCAL		69,000	69,000
	TOTAL		334,000	334,000
1977	FEDERAL	8,000		8,000
	STATE/LOCAL	20,000		20,000
	TOTAL	28,000		28,000
1982	FEDERAL	1,000		1,000
	STATE/LOCAL	2,000		2,000
	TOTAL	3,000		3,000
1987	FEDERAL	1,000		1,000
	STATE/LOCAL	4,000		4,000
	TOTAL	5,000		5,000
1992	FEDERAL	1,000		1,000
	STATE/LOCAL	4,000		4,000
	TOTAL	5,000		5,000
TOTAL COSTS TO 1992	FEDERAL	11,000	265,000	276,000
	STATE/LOCAL	30,000	69,000	99,000
	TOTAL	41,000	334,000	375,000

ROUNDUP

AIRPORT LAYOUT



MSASP AIRFIELD DEVELOPMENT COSTS IN THOUSANDS OF 1972 DOLLARS

ROUNDUP

AIRSIDE

		FED SHARE	TOTAL	FED GRANTS	STATE/LOCAL
	BEFORE 1977				
1	EXTEND RUNWAY(4-22)				
	A EARTH WORK	79.46	7.05	5.60	1.44
	B LAND ACQUISITION	79.46	5.00	3.97	1.02
	C EASEMENTS	79.46	0.80	0.63	0.16
	D SITE PREPARATION	79.46	3.48	2.76	0.71
	E OBSTRUCTIONS	79.46	0.10	0.07	0.02
	F DRAINAGE	79.46	2.10	1.66	0.43
	G PAVING	79.46	13.30	10.56	2.73
	H LIGHTING	79.46	2.10	1.66	0.43
2	RECONSTRUCT RUNWAY(4/22)	79.46	300.00	238.37	61.62
	TOTAL ($000)		333.97	265.38	68.63
	TOTAL PROJECT COSTS		333.97	265.38	68.63

LANDSIDE

FEDERAL SHARE OF THE PROJECT COSTS

	FED SHARE	1977	1982	1987	1992
1 GA TERMINAL BUILDING AREA(SF)	0.00	0.	0.	0.	0.
2 GA AIRCRAFT LOADING POSITIONS(NUMBER)	0.00	0.	0.	0.	0.
3 GA AC LOADING & BYPASS APRON AREA(SY)	79.46	0.	0.	0.	0.
4 ITINERANT AIRCRAFT PARKING AREA(SY)	79.46	0.	0.	0.	0.
5 GA BASED AIRCRAFT TIE-DOWN AREA(SY)	79.46	3757.	417.	417.	417.
6 GA CONV HANGAR BLDG AND APRON AREA(SY)	79.46	0.	0.	0.	0.
7 GA *T* HANGAR BLDG & APRON AREA(SY)	79.46	2897.	322.	322.	322.
8 GA PUBLIC VEHICULAR PARKING SPACE(NO.)	0.00	0.	0.	0.	0.
9 GA PUBLIC VEHICULAR PARKIMG AREA(SY)	0.00	0.	0.	0.	0.
10 AIRPORT MAINTENANCE APRON AREA(SY)	79.46	858.	80.	71.	134.
11 AIRPORT MAINTENANCE BUILDING(SF)	0.00	0.	0.	0.	0.
TOTAL IN THOUSANDS OF DOLLARS		7.5	0.8	0.8	0.9

PROJECT COST LESS FEDERAL GRANTS

	FED SHARE	1977	1982	1987	1992
1 GA TERMINAL BUILDING AREA(SF)	0.00	6530.	810.	1620.	1620.
2 GA AIRCRAFT LOADING POSITIONS(NUMBER)	0.00	0.	0.	0.	0.
3 GA AC LOADING & BYPASS APRON AREA(SY)	79.46	0.	0.	0.	0.
4 ITINERANT AIRCRAFT PARKING AREA(SY)	79.46	0.	0.	0.	0.
5 GA BASED AIRCRAFT TIE-DOWN AREA(SY)	79.46	971.	107.	107.	107.
6 GA CONV HANGAR BLDG AND APRON AREA(SY)	79.46	0.	0.	0.	0.
7 GA *T* HANGAR BLDG & APRON AREA(SY)	79.46	2572.	286.	286.	286.
8 GA PUBLIC VEHICULAR PARKING SPACE(NO.)	0.00	0.	0.	0.	0.
9 GA PUBLIC VEHICULAR PARKIMG AREA(SY)	0.00	9730.	748.	1497.	1497.
10 AIRPORT MAINTENANCE APRON AREA(SY)	79.46	221.	20.	18.	34.
11 AIRPORT MAINTENANCE BUILDING(SF)	0.00	300.	28.	25.	47.
TOTAL IN THOUSANDS OF DOLLARS		20.3	2.0	3.6	3.6

RYEGATE

The town of Ryegate is situated in south central Montana on the Musselshell River. It is 30 miles east of Harlowton and 37 miles west of Roundup on U. S. 12.

The airport is just south of town. Existing and future air activity will be of 'D & E' type aircraft.

Facility Requirements

Only a small amount of land side work is projected.

Name: RYEGATE

Site Number:. 12490.7

County: GOLDEN VALLEY

District: 6

PEAK HOUR IFR AND VFR DEMAND FORECASTS

	1977	1982	1987	1992
RYEGATE, MONTANA				
TOTAL PEAK HOUR VFR DEMAND	1.	2.	2.	3.
GA IFR PEAK HOUR DEMAND	0.	0.	0.	0.

OPERATIONAL DATA

DEMAND FORECAST INDICATORS	1977	1982	1987	1992
1 TOTAL GA ANNUAL OPERATIONS	400.0	500.0	700.0	1000.0
2 GA PEAK HOUR OPERATIONS	1.0	2.0	2.0	3.0
3 PERCENT GA ITINERANT OPERATIONS	100.0	100.0	85.0	80.0
4 BASED AIRCRAFT UNDER 12500 LBS	0.0	0.0	1.0	1.0
5 BASED AIRCRAFT OVER 12500 LBS	0.0	0.0	0.0	0.0

AIRCRAFT MIX AND CAPACITY FORECASTS

	1972	1977	1982	1987	1992
AIRCRAFT TYPE *A*	0	0	0	0	0
AIRCRAFT TYPE *B*	0	0	0	0	0
AIRCRAFT TYPE *C*	0	0	0	0	0
AIRCRAFT TYPE *D+E*	100	100	100	100	100
HOURLY CAPACITY VFR	77	88	99	99	99
HOURLY CAPACITY IFR	0	0	0	0	0
ANNUAL CAPACITY(000)	107	122	138	138	138

DEVELOPMENT COST SUMMARY

PLAN PERIOD	PARTICIPATION	LAND SIDE	AIR SIDE	TOTAL
BEFORE 1977	FEDERAL	$	$	$
	STATE/LOCAL			
	TOTAL			
1977	FEDERAL			
	STATE/LOCAL	1,000		1,000
	TOTAL	1,000		1,000
1982	FEDERAL			
	STATE/LOCAL	3,000		3,000
	TOTAL	3,000		3,000
1987	FEDERAL			
	STATE/LOCAL	2,000		2,000
	TOTAL	2,000		2,000
1992	FEDERAL			
	STATE/LOCAL	1,000		1,000
	TOTAL	1,000		1,000
TOTAL COSTS TO 1992	FEDERAL			
	STATE/LOCAL	7,000		7,000
	TOTAL	7,000		7,000

RYEGATE

RYEGATE

NO AIR SIDE DEVELOPMENTS REQUIRED

LANDSIDE

FEDERAL SHARE OF THE PROJECT COSTS

	FED SHARE	1977	1982	1987	1992
1 GA TERMINAL BUILDING AREA(SF)	0.00	0.	0.	0.	0.
2 GA AIRCRAFT LOADING POSITIONS(NUMBER)	0.00	0.	0.	0.	0.
3 GA AC LOADING & BYPASS APRON AREA(SY)	0.00	0.	0.	0.	0.
4 ITINERANT AIRCRAFT PARKING AREA(SY)	0.00	0.	0.	0.	0.
5 GA BASED AIRCRAFT TIE-DOWN AREA(SY)	0.00	0.	0.	0.	0.
6 GA CONV HANGAR BLDG AND APRON AREA(SY)	0.00	0.	0.	0.	0.
7 GA *T* HANGAR BLDG & APRON AREA(SY)	0.00	0.	0.	0.	0.
8 GA PUBLIC VEHICULAR PARKING SPACE(NO.)	0.00	0.	0.	0.	0.
9 GA PUBLIC VEHICULAR PARKING AREA(SY)	0.00	0.	0.	0.	0.
10 AIRPORT MAINTENANCE APRON AREA(SY)	0.00	0.	0.	0.	0.
11 AIRPORT MAINTENANCE BUILDING(SF)	0.00	0.	0.	0.	0.
TOTAL IN THOUSANDS OF DOLLARS		0.0	0.0	0.0	0.0

PROJECT COST LESS FEDERAL GRANTS

	FED SHARE	1977	1982	1987	1992
1 GA TERMINAL BUILDING AREA(SF)	0.00	0.	0.	0.	0.
2 GA AIRCRAFT LOADING POSITIONS(NUMBER)	0.00	0.	0.	0.	0.
3 GA AC LOADING & BYPASS APRON AREA(SY)	0.00	0.	1020.	0.	0.
4 ITINERANT AIRCRAFT PARKING AREA(SY)	0.00	0.	1530.	0.	0.
5 GA BASED AIRCRAFT TIE-DOWN AREA(SY)	0.00	3.	0.	525.	0.
6 GA CONV HANGAR BLDG AND APRON AREA(SY)	0.00	0.	0.	408.	0.
7 GA *T* HANGAR BLDG & APRON AREA(SY)	0.00	0.	0.	408.	0.
8 GA PUBLIC VEHICULAR PARKING SPACE(NO.)	0.00	0.	0.	0.	0.
9 GA PUBLIC VEHICULAR PARKING AREA(SY)	0.00	748.	748.	0.	748.
10 AIRPORT MAINTENANCE APRON AREA(SY)	0.00	72.	18.	36.	54.
11 AIRPORT MAINTENANCE BUILDING(SF)	0.00	20.	5.	10.	15.
TOTAL IN THOUSANDS OF DOLLARS		0.8	3.3	1.6	0.8

ST. IGNATIUS

St. Ignatius is within the Flathead Indian Reservation of western Montana just east of the Montana National Bison Range. Ronan is 27 miles north on U. S. 93.

The airport is east of town. Air activity will consist of 'D & E' aircraft type.

Facility Requirements

A small amount of land side work should be completed in 1977. The present unpaved landing strip cannot be expanded, due to roads at both ends. Therefore, a new site estimate for 1992 is included.

Name: ST. IGNATIUS

Site Number: 12491.3

County: LAKE

District: 10

PEAK HOUR IFR AND VFR DEMAND FORECASTS

	1977	1982	1987	1992
ST. IGNATIUS, MONTANA				
TOTAL PEAK HOUR VFR DEMAND	3.	4.	6.	6.
GA IFR PEAK HOUR DEMAND	0.	0.	1.	1.

OPERATIONAL DATA

DEMAND FORECAST INDICATORS

	1977	1982	1987	1992
1 TOTAL GA ANNUAL OPERATIONS	1400.0	1700.0	2400.0	2800.0
2 GA PEAK HOUR OPERATIONS	3.0	4.0	6.0	6.0
3 PERCENT GA ITINERANT OPERATIONS	35.0	35.0	30.0	30.0
4 BASED AIRCRAFT UNDER 12500 LBS	4.0	5.0	6.0	7.0
5 BASED AIRCRAFT OVER 12500 LBS	0.0	0.0	0.0	0.0

AIRCRAFT MIX AND CAPACITY FORECASTS

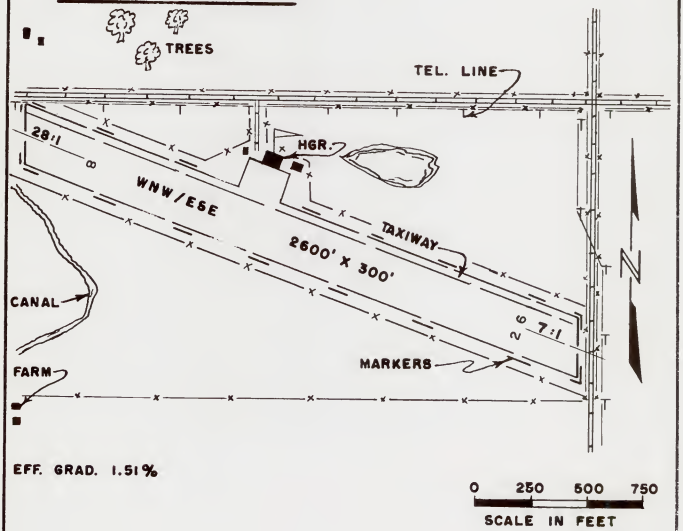
	1972	1977	1982	1987	1992
AIRCRAFT TYPE *A*	0	0	0	0	0
AIRCRAFT TYPE *B*	0	0	0	0	0
AIRCRAFT TYPE *C*	0	0	0	0	0
AIRCRAFT TYPE *D+E*	100	100	100	100	100
HOURLY CAPACITY VFR	85	92	99	99	99
HOURLY CAPACITY IFR	0	0	0	0	0
ANNUAL CAPACITY(000)	118	128	138	138	138

DEVELOPMENT COST SUMMARY

PLAN PERIOD	PARTICIPATION	LAND SIDE	AIR SIDE	TOTAL
BEFORE 1977	FEDERAL			
	STATE/LOCAL			
	TOTAL			
1977	FEDERAL	$	$	$
	STATE/LOCAL	10,000		10,000
	TOTAL	10,000		10,000
1982	FEDERAL			
	STATE/LOCAL	2,000		2,000
	TOTAL	2,000		2,000
1987	FEDERAL		12,000	12,000
	STATE/LOCAL	3,000	4,000	7,000
	TOTAL	3,000	16,000	19,000
1992	FEDERAL	1,000	98,000	99,000
	STATE/LOCAL	1,000	25,000	26,000
	TOTAL	2,000	123,000	125,000
TOTAL COSTS TO 1992	FEDERAL	1,000	110,000	111,000
	STATE/LOCAL	16,000	29,000	45,000
	TOTAL	17,000	139,000	156,000

ST. IGNATIUS

AIRPORT LAYOUT



MSASP AIRFIELD DEVELOPMENT COSTS IN THOUSANDS OF 1972 DOLLARS

ST. IGNATIUS-NEW

AIRSIDE

	FED SHARE	TOTAL	FED GRANTS	STATE/LOCAL
1987				
1 LAND ACQUISITION	79.46	15.60	12.39	3.20
TOTAL ($000)		15.60	12.40	3.20
1992				
2 SITE PREPARATION	79.46	10.50	8.34	2.15
3 LANDING AIDS				
A MIRL	79.46	20.40	16.20	4.19
B BEACON	79.46	5.00	3.97	1.02
4 ACCESS ROAD	79.46	50.00	39.72	10.27
5 REPLACE HANGARS	79.46	37.00	29.40	7.59
TOTAL ($000)		122.92	97.68	25.26
TOTAL PROJECT COSTS		138.52	110.08	28.47

LANDSIDE

FEDERAL SHARE OF THE PROJECT COSTS

	FED SHARE	1977	1982	1987	1992
1 GA TERMINAL BUILDING AREA(SF)	0.00	0.	0.	0.	0.
2 GA AIRCRAFT LOADING POSITIONS(NUMBER)	0.00	0.	0.	0.	0.
3 GA AC LOADING & BYPASS APRON AREA(SY)	79.46	0.	0.	0.	0.
4 ITINERANT AIRCRAFT PARKING AREA(SY)	79.46	0.	0.	0.	0.
5 GA BASED AIRCRAFT TIE-DOWN AREA(SY)	79.46	0.	0.	0.	417.
6 GA CONV HANGAR BLDG AND APRON AREA(SY)	79.46	0.	0.	0.	0.
7 GA *T* HANGAR BLDG & APRON AREA(SY)	79.46	0.	0.	0.	161.
8 GA PUBLIC VEHICULAR PARKING SPACE(NO.)	0.00	0.	0.	0.	0.
9 GA PUBLIC VEHICULAR PARKIMG AREA(SY)	0.00	0.	0.	0.	0.
10 AIRPORT MAINTENANCE APRON AREA(SY)	79.46	0.	0.	0.	57.
11 AIRPORT MAINTENANCE BUILDING(SF)	0.00	0.	0.	0.	0.
TOTAL IN THOUSANDS OF DOLLARS		0.0	0.0	0.0	0.6

PROJECT COST LESS FEDERAL GRANTS

	FED SHARE	1977	1982	1987	1992
1 GA TERMINAL BUILDING AREA(SF)	0.00	0.	0.	0.	0.
2 GA AIRCRAFT LOADING POSITIONS(NUMBER)	0.00	0.	0.	0.	0.
3 GA AC LOADING & BYPASS APRON AREA(SY)	79.46	1020.	0.	0.	0.
4 ITINERANT AIRCRAFT PARKING AREA(SY)	79.46	1530.	0.	0.	0.
5 GA BASED AIRCRAFT TIE-DOWN AREA(SY)	79.46	2103.	525.	525.	107.
6 GA CONV HANGAR BLDG AND APRON AREA(SY)	79.46	0.	0.	0.	0.
7 GA *T* HANGAR BLDG & APRON AREA(SY)	79.46	2431.	608.	608.	447.
8 GA PUBLIC VEHICULAR PARKING SPACE(NO.)	0.00	0.	0.	0.	0.
9 GA PUBLIC VEHICULAR PARKIMG AREA(SY)	0.00	2245.	748.	1497.	0.
10 AIRPORT MAINTENANCE APRON AREA(SY)	79.46	252.	54.	126.	14.
11 AIRPORT MAINTENANCE BUILDING(SF)	0.00	70.	15.	35.	20.
TOTAL IN THOUSANDS OF DOLLARS		9.7	2.0	2.8	0.6

SCHAFER

Schafer is a U. S. Forest Service landing strip located in the Flathead National Forest, 17 miles south of Summit and approximately five miles west of the Bob Marshall Wilderness. The Middle Fork of the Flathead River is just south of the landing strip. There is no access by road to this area. Only light aircraft are expected.

Facility Requirements

Minimal land side additions are necessary throughout the forecast period.

Name: SCHAFER

Site Number: 12494

County: FLATHEAD

District: 10

PEAK HOUR IFR AND VFR DEMAND FORECASTS

	1977	1982	1987	1992
SCHAFER, MONTANA				
TOTAL PEAK HOUR VFR DEMAND	1.	1.	1.	2.
GA IFR PEAK HOUR DEMAND	0.	0.	0.	0.

OPERATIONAL DATA

DEMAND FORECAST INDICATORS

	1977	1982	1987	1992
1 TOTAL GA ANNUAL OPERATIONS	200.0	300.0	400.0	500.0
2 GA PEAK HOUR OPERATIONS	1.0	1.0	1.0	2.0
3 PERCENT GA ITINERANT OPERATIONS	100.0	100.0	75.0	60.0
4 BASED AIRCRAFT UNDER 12500 LBS	0.0	0.0	1.0	1.0
5 BASED AIRCRAFT OVER 12500 LBS	0.0	0.0	0.0	0.0

AIRCRAFT MIX AND CAPACITY FORECASTS

	1972	1977	1982	1987	1992
AIRCRAFT TYPE *A*	0	0	0	0	0
AIRCRAFT TYPE *B*	0	0	0	0	0
AIRCRAFT TYPE *C*	0	0	0	0	0
AIRCRAFT TYPE *D+F*	100	100	100	100	100
HOURLY CAPACITY VFR	77	88	99	99	99
HOURLY CAPACITY IFR	0	0	0	0	0
ANNUAL CAPACITY(000)	107	122	138	138	138

DEVELOPMENT COST SUMMARY

PLAN PERIOD	PARTICIPATION	LAND SIDE	AIR SIDE	TOTAL
BEFORE 1977	FEDERAL			
	STATE/LOCAL			
	TOTAL			
1977	FEDERAL	$ 1,000	$	$ 1,000
	STATE/LOCAL			
	TOTAL	1,000		1,000
1982	FEDERAL			
	STATE/LOCAL			
	TOTAL			
1987	FEDERAL	2,000		2,000
	STATE/LOCAL			
	TOTAL	2,000		2,000
1992	FEDERAL	3,000		3,000
	STATE/LOCAL			
	TOTAL	3,000		3,000
TOTAL COSTS TO 1992	FEDERAL	6,000		6,000
	STATE/LOCAL			
	TOTAL	6,000		6,000

SCHAFER

SCHAFER

NO AIR SIDE DEVELOPMENTS REQUIRED

LANDSIDE

FEDERAL SHARE OF THE PROJECT COSTS

	FED SHARE	1977	1982	1987	1992
1 GA TERMINAL BUILDING AREA(SF)	100.00	0.	0.	0.	0.
2 GA AIRCRAFT LOADING POSITIONS(NUMBER)	100.00	0.	0.	0.	0.
3 GA AC LOADING & BYPASS APRON AREA(SY)	100.00	0.	0.	0.	1020.
4 ITINERANT AIRCRAFT PARKING AREA(SY)	100.00	0.	0.	0.	1530.
5 GA BASED AIRCRAFT TIE-DOWN AREA(SY)	100.00	3.	0.	525.	0.
6 GA CONV HANGAR BLDG AND APRON AREA(SY)	100.00	0.	0.	408.	0.
7 GA *T* HANGAR BLDG & APRON AREA(SY)	100.00	0.	0.	608.	0.
8 GA PUBLIC VEHICULAR PARKING SPACE(NO.)	100.00	0.	0.	0.	0.
9 GA PUBLIC VEHICULAR PARKING AREA(SY)	100.00	748.	0.	0.	748.
10 AIRPORT MAINTENANCE APRON AREA(SY)	100.00	36.	18.	18.	18.
11 AIRPORT MAINTENANCE BUILDING(SF)	100.00	10.	5.	5.	5.
TOTAL IN THOUSANDS OF DOLLARS		0.8	0.0	1.6	3.3

PROJECT COST LESS FEDERAL GRANTS

	FED SHARE	1977	1982	1987	1992
1 GA TERMINAL BUILDING AREA(SF)	100.00	0.	0.	0.	0.
2 GA AIRCRAFT LOADING POSITIONS(NUMBER)	100.00	0.	0.	0.	0.
3 GA AC LOADING & BYPASS APRON AREA(SY)	100.00	0.	0.	0.	0.
4 ITINERANT AIRCRAFT PARKING AREA(SY)	100.00	0.	0.	0.	0.
5 GA BASED AIRCRAFT TIE-DOWN AREA(SY)	100.00	0.	0.	0.	0.
6 GA CONV HANGAR BLDG AND APRON AREA(SY)	100.00	0.	0.	0.	0.
7 GA *T* HANGAR BLDG & APRON AREA(SY)	100.00	0.	0.	0.	0.
8 GA PUBLIC VEHICULAR PARKING SPACE(NO.)	100.00	0.	0.	0.	0.
9 GA PUBLIC VEHICULAR PARKING AREA(SY)	100.00	0.	0.	0.	0.
10 AIRPORT MAINTENANCE APRON AREA(SY)	100.00	0.	0.	0.	0.
11 AIRPORT MAINTENANCE BUILDING(SF)	100.00	0.	0.	0.	0.
TOTAL IN THOUSANDS OF DOLLARS		0.0	0.0	0.0	0.0

SCOBEY

The town is in northeast Montana 10 miles north of the Fort Peck Indian Reservation and 14 miles from the U. S. - Canadian border. Scobey is served by State Route 13 to the north and south, and by State Route 5 to the east.

The airport is located one mile northwest of town. Only 'D & E' type aircraft are expected.

Facility Requirements

A moderate amount of land side work is needed in 1977, with terminal building area being the large cost item. The runway should be extended before 1977.

NAVAIDS: An NDB should be installed by 1977, to accommodate the forecasted IFR traffic.

Name: SCOBEY

Site Number:. 12495

County:. DANIELS

District:. 1

PEAK HOUR IFR AND VFR DEMAND FORECASTS

	1977	1982	1987	1992
SCOBEY MONTANA				
TOTAL PEAK HOUR VFR DEMAND	14.	15.	16.	17.
GA IFR PEAK HOUR DEMAND	1.	1.	1.	2.

OPERATIONAL DATA

AIRCRAFT TYPE *A*	0	0	0	0	0
AIRCRAFT TYPE *B*	0	0	0	0	0
AIRCRAFT TYPE *C*	0	0	0	0	0
AIRCRAFT TYPE *D+E*	100	100	100	100	100
HOURLY CAPACITY VFR	77	88	99	99	99
HOURLY CAPACITY IFR	0	0	0	0	0
ANNUAL CAPACITY(000)	107	122	138	138	138

AIRCRAFT MIX AND CAPACITY FORECASTS

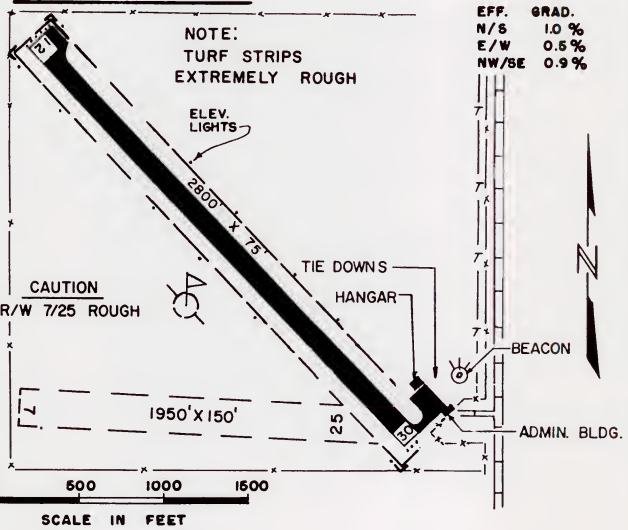
DEMAND FORECAST INDICATORS	1972	1977	1982	1987	1992
		1977	1982	1987	1992
1 TOTAL GA ANNUAL OPERATIONS		6330.0	6560.0	6770.0	7140.0
2 GA PEAK HOUR OPERATIONS		14.0	15.0	16.0	17.0
3 PERCENT GA ITINERANT OPERATIONS		30.0	32.0	34.0	35.0
4 BASED AIRCRAFT UNDER 12500 LBS		10.0	11.0	12.0	13.0
5 BASED AIRCRAFT OVER 12500 LBS		0.0	0.0	0.0	0.0

DEVELOPMENT COST SUMMARY

PLAN PERIOD	PARTICIPATION	LAND SIDE	AIR SIDE	TOTAL
BEFORE 1977	FEDERAL	$	$ 64,000	$ 64,000
	STATE/LOCAL		16,000	16,000
	TOTAL		80,000	80,000
1977	FEDERAL	5,000	6,000	11,000
	STATE/LOCAL	15,000	2,000	17,000
	TOTAL	20,000	8,000	28,000
1982	FEDERAL	1,000		1,000
	STATE/LOCAL	2,000		2,000
	TOTAL	3,000		3,000
1987	FEDERAL	2,000		2,000
	STATE/LOCAL	2,000		2,000
	TOTAL	4,000		4,000
1992	FEDERAL	1,000		1,000
	STATE/LOCAL	2,000		2,000
	TOTAL	3,000		3,000
TOTAL COSTS TO 1992	FEDERAL	9,000	70,000	79,000
	STATE/LOCAL	21,000	18,000	39,000
	TOTAL	30,000	88,000	118,000

SCOBEY

AIRPORT LAYOUT



MSASP AIRFIELD DEVELOPMENT COSTS IN THOUSANDS OF 1972 DOLLARS

SCOBEY

AIRSIDE

	FED SHARE	TOTAL	FED GRANTS	STATE/LOCAL
BEFORE 1977				
1 EXTEND RUNWAY(12-30)				
A EARTHWORK	79.46	4.50	3.57	0.92
B LAND ACQUISITION	79.46	2.89	2.29	0.59
C EASEMENTS	79.46	0.80	0.63	0.16
D SITE PREPARATION	79.46	4.50	3.57	0.92
E OBSTRUCTION REMOVAL	79.46	0.70	0.55	0.14
F PAVING	79.46	33.30	26.46	6.83
G LIGHTING (MIRL)	79.46	33.50	26.61	6.88
TOTAL ($000)		80.22	63.75	16.50
1977				
2 NDB	79.46	8.00	6.35	1.64
TOTAL ($000)		8.00	6.36	1.64
TOTAL PROJECT COSTS		88.22	70.11	18.15

LANDSIDE

FEDERAL SHARE OF THE PROJECT COSTS

	FED SHARE	1977	1982	1987	1992
1 GA TERMINAL BUILDING AREA(SF)	0.00	0.	0.	0.	0.
2 GA AIRCRAFT LOADING POSITIONS(NUMBER)	0.00	0.	0.	0.	0.
3 GA AC LOADING & BYPASS APRON AREA(SY)	79.46	0.	0.	0.	0.
4 ITINERANT AIRCRAFT PARKING AREA(SY)	79.46	0.	0.	1120.	0.
5 GA BASED AIRCRAFT TIE-DOWN AREA(SY)	79.46	417.	417.	417.	417.
6 GA CONV HANGAR BLDG AND APRON AREA(SY)	79.46	0.	0.	0.	0.
7 GA *T* HANGAR BLDG & APRON AREA(SY)	79.46	0.	0.	0.	0.
8 GA PUBLIC VEHICULAR PARKING SPACE(NO.)	0.00	0.	0.	0.	0.
9 GA PUBLIC VEHICULAR PARKIMG AREA(SY)	0.00	0.	0.	0.	0.
10 AIRPORT MAINTENANCE APRON AREA(SY)	79.46	905.	33.	30.	53.
11 AIRPORT MAINTENANCE BUILDING(SF)	0.00	0.	0.	0.	0.
TOTAL IN THOUSANDS OF DOLLARS		5.1	0.5	1.6	0.5

PROJECT COST LESS FEDERAL GRANTS

	FED SHARE	1977	1982	1987	1992
1 GA TERMINAL BUILDING AREA(SF)	0.00	10340.	810.	810.	810.
2 GA AIRCRAFT LOADING POSITIONS(NUMBER)	0.00	0.	0.	0.	0.
3 GA AC LOADING & BYPASS APRON AREA(SY)	79.46	0.	0.	0.	0.
4 ITINERANT AIRCRAFT PARKING AREA(SY)	79.46	0.	0.	289.	0.
5 GA BASED AIRCRAFT TIE-DOWN AREA(SY)	79.46	1079.	107.	107.	107.
6 GA CONV HANGAR BLDG AND APRON AREA(SY)	79.46	0.	0.	0.	0.
7 GA *T* HANGAR BLDG & APRON AREA(SY)	79.46	0.	0.	0.	0.
8 GA PUBLIC VEHICULAR PARKING SPACE(NO.)	0.00	0.	0.	0.	0.
9 GA PUBLIC VEHICULAR PARKIMG AREA(SY)	0.00	3158.	748.	748.	748.
10 AIRPORT MAINTENANCE APRON AREA(SY)	79.46	234.	8.	7.	13.
11 AIRPORT MAINTENANCE BUILDING(SF)	0.00	317.	11.	11.	18.
TOTAL IN THOUSANDS OF DOLLARS		15.1	1.7	2.0	1.7

SEELY LAKE

The small town of Seeley Lake is situated in the Rocky Mountain region of western Montana. It is in the Lolo National Forest on county route 209, 47 miles northeast of Missoula.

The airport is two miles east of the town. Light small aircraft is expected for the entire period.

Facility Requirements

Small hand side additions will be required in 1977. The landing strip should be extended slightly before 1977.

Name: SEELY LAKE

Site Number:. 12496.1

County:. MISSOULA

District:. 11

PEAK HOUR IFR AND VFR DEMAND FORECASTS

	1977	1982	1987	1992
SEELY LAKE, MONTANA				
TOTAL PEAK HOUR VFR DEMAND	2.	2.	3.	4.
GA IFR PEAK HOUR DEMAND	0.	0.	0.	0.

OPERATIONAL DATA

AIRCRAFT TYPE *A*	0	0	0	0	0
AIRCRAFT TYPE *B*	0	0	0	0	0
AIRCRAFT TYPE *C*	0	0	0	0	0
AIRCRAFT TYPE *D+E*	100	100	100	100	100
HOURLY CAPACITY VFR	77	88	99	99	99
HOURLY CAPACITY IFR	0	0	0	0	0
ANNUAL CAPACITY(000)	107	122	138	138	138

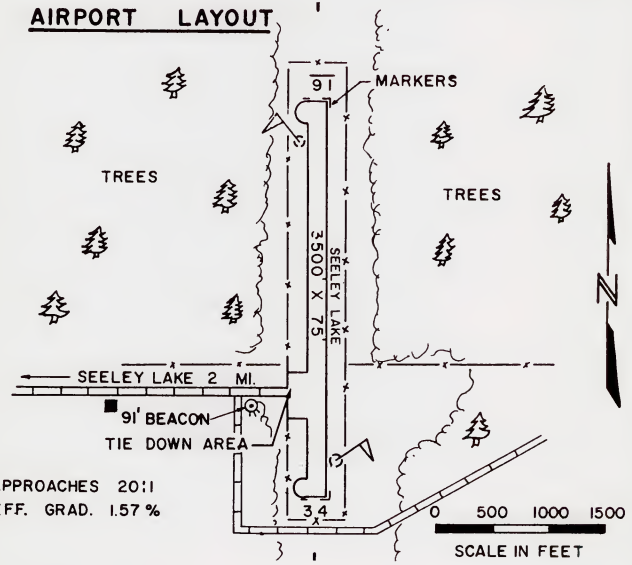
AIRCRAFT MIX AND CAPACITY FORECASTS

DEMAND FORECAST INDICATORS	1972	1977	1982	1987	1992
1 TOTAL GA ANNUAL OPERATIONS		700.0	900.0	1200.0	1600.0
2 GA PEAK HOUR OPERATIONS		2.0	2.0	3.0	4.0
3 PERCENT GA ITINERANT OPERATIONS		85.0	78.0	75.0	72.0
4 BASED AIRCRAFT UNDER 12500 LBS		1.0	1.0	2.0	3.0
5 BASED AIRCRAFT OVER 12500 LBS		0.0	0.0	0.0	0.0

DEVELOPMENT COST SUMMARY

PLAN PERIOD	PARTICIPATION	LAND SIDE	AIR SIDE	TOTAL
BEFORE 1977	FEDERAL			
	STATE/LOCAL			
	TOTAL			
1977	FEDERAL	$	$	$
	STATE/LOCAL	5,000	8,000	13,000
	TOTAL	5,000	8,000	13,000
1982	FEDERAL			
	STATE/LOCAL			
	TOTAL			
1987	FEDERAL			
	STATE/LOCAL	2,000		2,000
	TOTAL	2,000		2,000
1992	FEDERAL			
	STATE/LOCAL	2,000		2,000
	TOTAL	2,000		2,000
TOTAL COSTS TO 1992	FEDERAL			
	STATE/LOCAL	9,000	8,000	17,000
	TOTAL	9,000	8,000	17,000

SEELY LAKE


AIRPORT LAYOUT
91
MARKERS
TREES
TREES
3500' X 75'
SEELEY LAKE
SEELEY LAKE 2 MI.
91' BEACON
TIE DOWN AREA
APPROACHES 20:1
EFF. GRAD. 1.57 %
34
0 500 1000 1500
SCALE IN FEET

MSASP AIRFIELD DEVELOPMENT COSTS IN THOUSANDS OF 1972 DOLLARS

SEELEY LAKE

	FED SHARE	TOTAL	FED GRANTS	STATE/LOCAL
1977				
1 EXTEND LANDING STRIP				
A EARTH WORK	0.00	3.00	0.00	3.00
B SITE PREPARATION	0.00	4.20	0.00	4.20
C EASEMENTS	0.00	0.40	0.00	0.40
TOTAL ($000)		7.61	0.01	7.61
TOTAL PROJECT COSTS		7.61	0.01	7.61

SIDE AIR

FEDERAL SHARE OF THE PROJECT COSTS

	FED SHARE	1977	1982	1987	1992
1 GA TERMINAL BUILDING AREA(SF)	0.00	0.	0.	0.	0.
2 GA AIRCRAFT LOADING POSITIONS(NUMBER)	0.00	0.	0.	0.	0.
3 GA AC LOADING & BYPASS APRON AREA(SY)	0.00	0.	0.	0.	0.
4 ITINERANT AIRCRAFT PARKING AREA(SY)	0.00	0.	0.	0.	0.
5 GA BASED AIRCRAFT TIE-DOWN AREA(SY)	0.00	0.	0.	0.	0.
6 GA CONV HANGAR BLDG AND APRON AREA(SY)	0.00	0.	0.	0.	0.
7 GA *T* HANGAR BLDG & APRON AREA(SY)	0.00	0.	0.	0.	0.
8 GA PUBLIC VEHICULAR PARKING SPACE(NO.)	0.00	0.	0.	0.	0.
9 GA PUBLIC VEHICULAR PARKIMG AREA(SY)	0.00	0.	0.	0.	0.
10 AIRPORT MAINTENANCE APRON AREA(SY)	0.00	0.	0.	0.	0.
11 AIRPORT MAINTENANCE BUILDING(SF)	0.00	0.	0.	0.	0.
TOTAL IN THOUSANDS OF DOLLARS		0.0	0.0	0.0	0.0

SIDE LAND

PROJECT COST LESS FEDERAL GRANTS

	FED SHARE	1977	1982	1987	1992
1 GA TERMINAL BUILDING AREA(SF)	0.00	0.	0.	0.	0.
2 GA AIRCRAFT LOADING POSITIONS(NUMBER)	0.00	0.	0.	0.	0.
3 GA AC LOADING & BYPASS APRON AREA(SY)	0.00	1020.	0.	0.	0.
4 ITINERANT AIRCRAFT PARKING AREA(SY)	0.00	1530.	0.	0.	0.
5 GA BASED AIRCRAFT TIE-DOWN AREA(SY)	0.00	0.	0.	0.	0.
6 GA CONV HANGAR BLDG AND APRON AREA(SY)	0.00	408.	0.	408.	408.
7 GA *T* HANGAR BLDG & APRON AREA(SY)	0.00	408.	0.	408.	408.
8 GA PUBLIC VEHICULAR PARKING SPACE(NO.)	0.00	0.	0.	0.	0.
9 GA PUBLIC VEHICULAR PARKIMG AREA(SY)	0.00	1697.	0.	748.	748.
10 AIRPORT MAINTENANCE APRON AREA(SY)	0.00	126.	36.	54.	72.
11 AIRPORT MAINTENANCE BUILDING(SF)	0.00	35.	10.	15.	20.
TOTAL IN THOUSANDS OF DOLLARS		5.2	0.1	1.8	1.9

SHELBY

This city is situated in northern Montana, 20 miles northwest of the Tiber Reservoir and 35 miles from the U. S. - Canadian border. Interstate 15 passes one mile west of Shelby and U. S. 2 serves as the east-west route through the city. Amtrak provides daily passenger service between Havre and Cut Bank.

The airport is three miles north of town off U. S. 91. Beginning in 1977 'C' type aircraft will begin to operate.

Facility Requirements

Extensive additions and improvements should be made to terminal building areas and public vehicular parking area in 1977. An estimate is included for expanding and strengthening runway 5/23 and associated taxiways and paving the crosswind runway (11-29). A master plan should precede these costly improvements.

Name: SHELBY

Site Number: 12499

County: TOOLE

District: 5

PEAK HOUR IFR AND VFR DEMAND FORECASTS

	1977	1982	1987	1992
SHELBY MONTANA				
TOTAL PEAK HOUR VFR DEMAND	22.	24.	27.	29.
GA IFR PEAK HOUR DEMAND	1.	2.	2.	3.

OPERATIONAL DATA

DEMAND FORECAST INDICATORS

	1977	1982	1987	1992
1 TOTAL GA ANNUAL OPERATIONS	11330.0	12330.0	13670.0	15000.0
2 GA PEAK HOUR OPERATIONS	22.0	24.0	27.0	29.0
3 PERCENT GA ITINERANT OPERATIONS	30.0	30.0	30.0	30.0
4 BASED AIRCRAFT UNDER 12500 LBS	17.0	19.0	21.0	23.0
5 BASED AIRCRAFT OVER 12500 LBS	0.0	0.0	0.0	1.0

AIRCRAFT MIX AND CAPACITY FORECASTS

	1972	1977	1982	1987	1992
AIRCRAFT TYPE *A*	0	0	0	0	0
AIRCRAFT TYPE *B*	0	0	0	0	0
AIRCRAFT TYPE *C*	0	1	3	7	14
AIRCRAFT TYPE *D+E*	100	99	97	93	86
HOURLY CAPACITY VFR	77	88	99	99	99
HOURLY CAPACITY IFR	53	52	52	52	92
ANNUAL CAPACITY(000)	107	122	138	138	144

DEVELOPMENT COST SUMMARY

PLAN PERIOD	PARTICIPATION	LAND SIDE	AIR SIDE	TOTAL
BEFORE 1977	FEDERAL			
	STATE/LOCAL			
	TOTAL			
1977	FEDERAL	$ 7,000	$ 287,000	$ 294,000
	STATE/LOCAL	33,000	74,000	107,000
	TOTAL	40,000	361,000	401,000
1982	FEDERAL	1,000		1,000
	STATE/LOCAL	3,000		3,000
	TOTAL	4,000		4,000
1987	FEDERAL	1,000		1,000
	STATE/LOCAL	5,000		5,000
	TOTAL	6,000		6,000
1992	FEDERAL	2,000		2,000
	STATE/LOCAL	4,000		4,000
	TOTAL	6,000		6,000
TOTAL COSTS TO 1992	FEDERAL	11,000	287,000	298,000
	STATE/LOCAL	45,000	74,000	119,000
	TOTAL	56,000	361,000	417,000

SHELBY

MSASP AIRFIELD DEVELOPMENT COSTS IN THOUSANDS OF 1972 DOLLARS

SHELBY

			FED SHARE	TOTAL	FED GRANTS	STATE/LOCAL
	1977					
AIRSIDE	1	OVERLAY RUNWAY(5-23)+TW	79.46	120.00	95.35	24.64
	2	EXTEND RW(5-23)+TW				
		A EARTHWORK	79.46	55.00	43.70	11.29
		B LAND ACQUISITION	79.46	2.00	1.58	0.41
		C EASEMENTS	79.46	1.00	0.79	0.20
		D SITE PREPARATION	79.46	5.40	4.29	1.10
		E OBSTRUCTION REMOVAL	79.46	1.00	0.79	0.20
		F DRAINAGE	79.46	2.00	1.58	0.41
		G LIGHTING (MIRL)	79.46	9.80	7.78	2.01
	3	PAVE RUNWAY(11-29)	79.46	165.00	131.10	33.89
		TOTAL ($000)		361.24	287.05	74.23
		TOTAL PROJECT COSTS		361.24	287.05	74.23

FEDERAL SHARE OF THE PROJECT COSTS

LANDSIDE		FED SHARE	1977	1982	1987	1992
	1 GA TERMINAL BUILDING AREA(SF)	0.00	0.	0.	0.	0.
	2 GA AIRCRAFT LOADING POSITIONS(NUMBER)	0.00	0.	0.	0.	0.
	3 GA AC LOADING & BYPASS APRON AREA(SY)	79.46	0.	0.	0.	0.
	4 ITINERANT AIRCRAFT PARKING AREA(SY)	79.46	0.	0.	0.	0.
	5 GA BASED AIRCRAFT TIE-DOWN AREA(SY)	79.46	709.	834.	834.	1907.
	6 GA CONV HANGAR BLDG AND APRON AREA(SY)	79.46	0.	0.	0.	0.
	7 GA *T* HANGAR BLDG & APRON AREA(SY)	79.46	0.	0.	0.	0.
	8 GA PUBLIC VEHICULAR PARKING SPACE(NO.)	0.00	0.	0.	0.	0.
	9 GA PUBLIC VEHICULAR PARKING AREA(SY)	0.00	0.	0.	0.	0.
	10 AIRPORT MAINTENANCE APRON AREA(SY)	79.46	0.	119.	192.	190.
	11 AIRPORT MAINTENANCE BUILDING(SF)	0.00	0.	0.	0.	0.
	TOTAL IN THOUSANDS OF DOLLARS		7.1	1.0	1.0	2.1

PROJECT COST LESS FEDERAL GRANTS

LANDSIDE		FED SHARE	1977	1982	1987	1992
	1 GA TERMINAL BUILDING AREA(SF)	0.00	1662.	162.	243.	162.
	2 GA AIRCRAFT LOADING POSITIONS(NUMBER)	0.00	0.	0.	0.	0.
	3 GA AC LOADING & BYPASS APRON AREA(SY)	79.46	0.	0.	0.	0.
	4 ITINERANT AIRCRAFT PARKING AREA(SY)	79.46	0.	0.	0.	0.
	5 GA BASED AIRCRAFT TIE-DOWN AREA(SY)	79.46	183.	21.	21.	49.
	6 GA CONV HANGAR BLDG AND APRON AREA(SY)	79.46	0.	0.	0.	0.
	7 GA *T* HANGAR BLDG & APRON AREA(SY)	79.46	0.	0.	0.	0.
	8 GA PUBLIC VEHICULAR PARKING SPACE(NO.)	0.00	0.	0.	0.	0.
	9 GA PUBLIC VEHICULAR PARKING AREA(SY)	0.00	1466.	149.	224.	149.
	10 AIRPORT MAINTENANCE APRON AREA(SY)	79.46	0.	30.	49.	49.
	11 AIRPORT MAINTENANCE BUILDING(SF)	0.00	0.	0.	0.	0.
	TOTAL IN THOUSANDS OF DOLLARS		33.1	3.4	4.9	3.7

SPOTTED BEAR

Spotted Bear is a U.S. Forest Service landing strip. It is situated in the Flathead National Forest along the south fork of the Flathead River and just south of the Hungry Horse Reservoir. The area is remote, with access by an improved-gravelled road from the town of Hungry Horse. Small light aircraft will use the facility. A high recreational use of this airport warrants NASP entry for all periods.

Facility Requirements

Only minimal land side expansion is necessary.

Name: SPOTTED BEAR

Site Number: 12511

County: FLATHEAD

District: 10

PEAK HOUR IFR AND VFR DEMAND FORECASTS

	1977	1982	1987	1992
SPOTTED BEAR, MONTANA				
TOTAL PEAK HOUR VFR DEMAND	1.	2.	2.	3.
GA IFR PEAK HOUR DEMAND	0.	0.	0.	0.

OPERATIONAL DATA

DEMAND FORECAST INDICATORS	1977	1982	1987	1992
1 TOTAL GA ANNUAL OPERATIONS	400.0	500.0	700.0	900.0
2 GA PEAK HOUR OPERATIONS	1.0	2.0	2.0	3.0
3 PERCENT GA ITINERANT OPERATIONS	100.0	100.0	85.0	70.0
4 BASED AIRCRAFT UNDER 12500 LBS	0.0	0.0	1.0	1.0
5 BASED AIRCRAFT OVER 12500 LBS	0.0	0.0	0.0	0.0

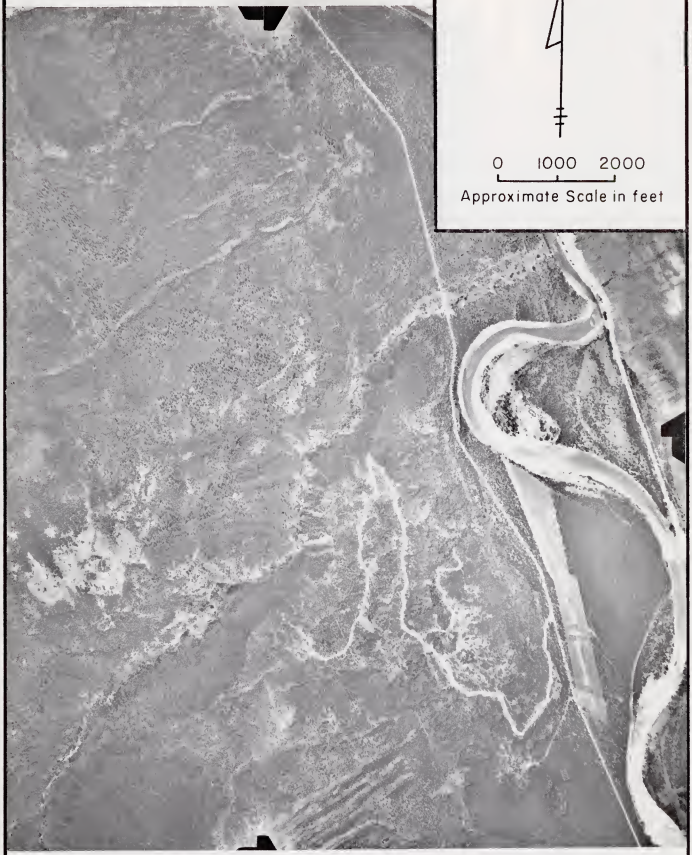
AIRCRAFT MIX AND CAPACITY FORECASTS

	1972	1977	1982	1987	1992
AIRCRAFT TYPE *A*	0	0	0	0	0
AIRCRAFT TYPE *B*	0	0	0	0	0
AIRCRAFT TYPE *C*	0	0	0	0	0
AIRCRAFT TYPE *D+E*	100	100	100	100	100
HOURLY CAPACITY VFR	77	88	99	99	99
HOURLY CAPACITY IFR	0	0	0	0	0
ANNUAL CAPACITY(000)	107	122	138	138	138

DEVELOPMENT COST SUMMARY

PLAN PERIOD	PARTICIPATION	LAND SIDE	AIR SIDE	TOTAL
BEFORE 1977	FEDERAL			
	STATE/LOCAL			
	TOTAL			
1977	FEDERAL	$ 1,000	$	$ 1,000
	STATE/LOCAL			
	TOTAL	1,000		1,000
1982	FEDERAL	3,000		3,000
	STATE/LOCAL			
	TOTAL	3,000		3,000
1987	FEDERAL	2,000		2,000
	STATE/LOCAL			
	TOTAL	2,000		2,000
1992	FEDERAL	1,000		1,000
	STATE/LOCAL			
	TOTAL	1,000		1,000
TOTAL COSTS TO 1992	FEDERAL	7,000		7,000
	STATE/LOCAL			
	TOTAL	7,000		7,000

SPOTTED BEAR



SPOTTED BEAR

NO AIR SIDE DEVELOPMENTS REQUIRED

LANDSIDE

FEDERAL SHARE OF THE PROJECT COSTS

	FED SHARE	1977	1982	1987	1992
1 GA TERMINAL BUILDING AREA(SF)	100.00	0.	0.	0.	0.
2 GA AIRCRAFT LOADING POSITIONS(NUMBER)	100.00	0.	0.	0.	0.
3 GA AC LOADING & BYPASS APRON AREA(SY)	100.00	0.	1020.	0.	0.
4 ITINERANT AIRCRAFT PARKING AREA(SY)	100.00	0.	1530.	0.	0.
5 GA BASED AIRCRAFT TIE-DOWN AREA(SY)	100.00	3.	0.	529.	0.
6 GA CONV HANGAR BLDG AND APRON AREA(SY)	100.00	0.	0.	408.	0.
7 GA *T* HANGAR BLDG & APRON AREA(SY)	100.00	0.	0.	608.	0.
8 GA PUBLIC VEHICULAR PARKING SPACE(NO.)	100.00	0.	0.	0.	0.
9 GA PUBLIC VEHICULAR PARKING AREA(SY)	100.00	748.	748.	0.	748.
10 AIRPORT MAINTENANCE APRON AREA(SY)	100.00	72.	18.	36.	36.
11 AIRPORT MAINTENANCE BUILDING(SF)	100.00	20.	5.	10.	10.
TOTAL IN THOUSANDS OF DOLLARS		0.8	3.3	1.6	0.8

PROJECT COST LESS FEDERAL GRANTS

	FED SHARE	1977	1982	1987	1992
1 GA TERMINAL BUILDING AREA(SF)	100.00	0.	0.	0.	0.
2 GA AIRCRAFT LOADING POSITIONS(NUMBER)	100.00	0.	0.	0.	0.
3 GA AC LOADING & BYPASS APRON AREA(SY)	100.00	0.	0.	0.	0.
4 ITINERANT AIRCRAFT PARKING AREA(SY)	100.00	0.	0.	0.	0.
5 GA BASED AIRCRAFT TIE-DOWN AREA(SY)	100.00	0.	0.	0.	0.
6 GA CONV HANGAR BLDG AND APRON AREA(SY)	100.00	0.	0.	0.	0.
7 GA *T* HANGAR BLDG & APRON AREA(SY)	100.00	0.	0.	0.	0.
8 GA PUBLIC VEHICULAR PARKING SPACE(NO.)	100.00	0.	0.	0.	0.
9 GA PUBLIC VEHICULAR PARKING AREA(SY)	100.00	0.	0.	0.	0.
10 AIRPORT MAINTENANCE APRON AREA(SY)	100.00	0.	0.	0.	0.
11 AIRPORT MAINTENANCE BUILDING(SF)	100.00	0.	0.	0.	0.
TOTAL IN THOUSANOS OF DOLLARS		0.0	0.0	0.0	0.0

STANFORD

The town is situated in central Montana, northeast of the Lewis and Clark National Forest and the Little Belt Mountains. Stanford is 61 miles southeast of Great Falls and 45 miles west of Lewistown on U. S. 87.

The airport is located southwest of the town, off U. S. 87. Aircraft operating will be of type 'D & E'.

Facility Requirements

Some land side addition is necessary in the 1977 increment period. An overlay for runway (11-29) should be programmed for 1977.

NAVAIDS: An NDB is recommended for installation by 1987, to accommodate the forecasted IFR traffic.

Name: STANFORD

Site Number: 12512

County: JUDITH BASIN

District: 6

PEAK HOUR IFR AND VFR DEMAND FORECASTS

	1977	1982	1987	1992
STANFORD MONTANA				
TOTAL PEAK HOUR VFR DEMAND	4.	5.	6.	7.
GA IFR PEAK HOUR DEMAND	0.	0.	1.	1.

OPERATIONAL DATA

DEMAND FORECAST INDICATORS	1977	1982	1987	1992
1 TOTAL GA ANNUAL OPERATIONS	2000.0	2330.0	2670.0	3000.0
2 GA PEAK HOUR OPERATIONS	4.0	5.0	6.0	7.0
3 PERCENT GA ITINERANT OPERATIONS	30.0	30.0	30.0	30.0
4 BASED AIRCRAFT UNDER 12500 LBS	3.0	4.0	5.0	6.0
5 BASED AIRCRAFT OVER 12500 LBS	0.0	0.0	0.0	0.0

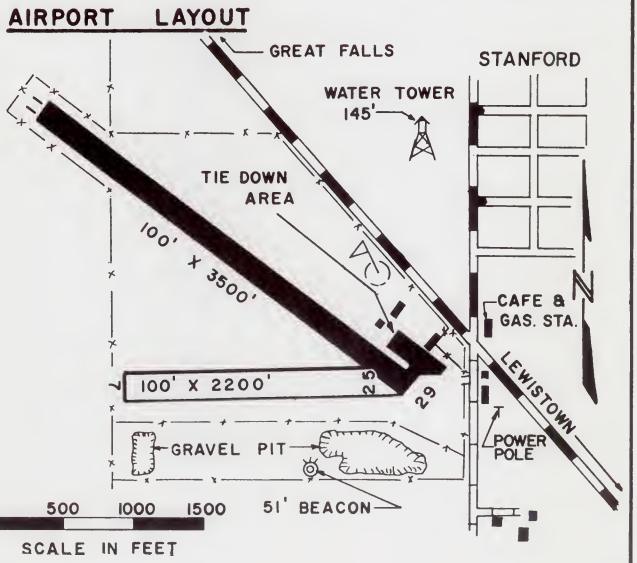
AIRCRAFT MIX AND CAPACITY FORECASTS

	1972	1977	1982	1987	1992
AIRCRAFT TYPE *A*	0	0	0	0	0
AIRCRAFT TYPE *B*	0	0	0	0	0
AIRCRAFT TYPE *C*	0	0	0	0	0
AIRCRAFT TYPE *D+E*	100	100	100	100	100
HOURLY CAPACITY VFR	77	88	99	99	99
HOURLY CAPACITY IFR	0	0	0	0	0
ANNUAL CAPACITY(000)	107	122	138	138	138

DEVELOPMENT COST SUMMARY

PLAN PERIOD	PARTICIPATION	LAND SIDE	AIR SIDE	TOTAL
BEFORE 1977	FEDERAL			
	STATE/LOCAL			
	TOTAL			
1977	FEDERAL	$	$	$
	STATE/LOCAL	8,000	105,000	113,000
	TOTAL	8,000	105,000	113,000
1982	FEDERAL			
	STATE/LOCAL	2,000		2,000
	TOTAL	2,000		2,000
1987	FEDERAL			
	STATE/LOCAL	2,000		2,000
	TOTAL	2,000		2,000
1992	FEDERAL	1,000	6,000	7,000
	STATE/LOCAL	1,000	2,000	3,000
	TOTAL	2,000	8,000	10,000
TOTAL COSTS TO 1992	FEDERAL	1,000	6,000	7,000
	STATE/LOCAL	13,000	107,000	120,000
	TOTAL	14,000	113,000	127,000

STANFORD


AIRPORT LAYOUT
GREAT FALLS
STANFORD
WATER TOWER
145'
TIE DOWN
AREA
100' X 3500'
CAFE &
GAS. STA.
LEWISTOWN
100' X 2200'
25
29
GRAVEL PIT
POWER
POLE
0 500 1000 1500
51' BEACON
SCALE IN FEET

MSASP AIRFIELD DEVELOPMENT COSTS IN THOUSANDS OF 1972 DOLLARS

STANFORD

AIRSIDE

		FED SHARE	TOTAL	FED GRANTS	STATE/LOCAL
	1977				
1	OVERLAY RUNWAY(11-29)	0.00	105.00	0.00	105.00
	TOTAL ($000)		105.00	0.00	105.00
	1992				
2	NDB	79.46	8.00	6.35	1.64
	TOTAL ($000)		8.00	6.36	1.64
	TOTAL PROJECT COSTS		113.00	6.36	106.65

LANDSIDE

FEDERAL SHARE OF THE PROJECT COSTS

	FED SHARE	1977	1982	1987	1992
1 GA TERMINAL BUILDING AREA(SF)	0.00	0.	0.	0.	0.
2 GA AIRCRAFT LOADING POSITIONS(NUMBER)	0.00	0.	0.	0.	0.
3 GA AC LOADING & BYPASS APRON AREA(SY)	79.46	0.	0.	0.	0.
4 ITINERANT AIRCRAFT PARKING AREA(SY)	79.46	0.	0.	0.	0.
5 GA BASED AIRCRAFT TIE-DOWN AREA(SY)	79.46	0.	0.	0.	417.
6 GA CONV HANGAR BLDG AND APRON AREA(SY)	79.46	0.	0.	0.	0.
7 GA #T# HANGAR BLDG & APRON AREA(SY)	79.46	0.	0.	0.	161.
8 GA PUBLIC VEHICULAR PARKING SPACE(NO.)	0.00	0.	0.	0.	0.
9 GA PUBLIC VEHICULAR PARKING AREA(SY)	0.00	0.	0.	0.	0.
10 AIRPORT MAINTENANCE APRON AREA(SY)	79.46	0.	0.	0.	47.
11 AIRPORT MAINTENANCE BUILDING(SF)	0.00	0.	0.	0.	0.
TOTAL IN THOUSANDS OF DOLLARS		0.0	0.0	0.0	0.6

PROJECT COST LESS FEDERAL GRANTS

	FED SHARE	1977	1982	1987	1992
1 GA TERMINAL BUILDING AREA(SF)	0.00	0.	0.	0.	0.
2 GA AIRCRAFT LOADING POSITIONS(NUMBER)	0.00	0.	0.	0.	0.
3 GA AC LOADING & BYPASS APRON AREA(SY)	79.46	0.	0.	0.	0.
4 ITINERANT AIRCRAFT PARKING AREA(SY)	79.46	1530.	0.	0.	0.
5 GA BASED AIRCRAFT TIE-DOWN AREA(SY)	79.46	1578.	525.	525.	107.
6 GA CONV HANGAR BLDG AND APRON AREA(SY)	79.46	0.	0.	0.	0.
7 GA #T# HANGAR BLDG & APRON AREA(SY)	79.46	1823.	608.	608.	447.
8 GA PUBLIC VEHICULAR PARKING SPACE(NO.)	0.00	0.	0.	0.	0.
9 GA PUBLIC VEHICULAR PARKING AREA(SY)	0.00	2094.	748.	748.	748.
10 AIRPORT MAINTENANCE APRON AREA(SY)	79.46	360.	59.	61.	12.
11 AIRPORT MAINTENANCE BUILDING(SF)	0.00	100.	17.	17.	17.
TOTAL IN THOUSANDS OF DOLLARS		7.5	2.0	2.0	1.3

STEVENSVILLE

The town is situated in the valley area between the Sapphire Mountains and the Bitterroot Range of western Montana. U. S. 93 passes one mile to the west of Stevensville. Hamilton is 20 miles to the south and Missoula is 27 miles north on U. S. 93.

The Stevensville City Airstrip is located two miles northeast of town off county route 203. Only 'D & E' type aircraft have been forecasted.

Facility Requirements

A small amount of land side work is needed for each interval. Air side expansion will include lighting in 1977 and paving in 1992.

NAVAIDS: An NDB should be considered for installation by 1987 to handle the forecasted IFR traffic demand.

Name: STEVENSVILLE

Site Number:. 12513

County:. RAVALLI

District:. 11

PEAK HOUR IFR AND VFR DEMAND FORECASTS

	1977	1982	1987	1992
STEVENSVILLE,MONTANA				
TOTAL PEAK HOUR VFR DEMAND	5.	6.	7.	9.
GA IFR PEAK HOUR DEMAND	0.	0.	1.	1.

OPERATIONAL DATA

DEMAND FORECAST INDICATORS	1977	1982	1987	1992
1 TOTAL GA ANNUAL OPERATIONS	1900.0	2500.0	3200.0	4000.0
2 GA PEAK HOUR OPERATIONS	5.0	6.0	7.0	9.0
3 PERCENT GA ITINERANT OPERATIONS	95.0	88.0	85.0	82.0
4 BASED AIRCRAFT UNDER 12500 LBS	1.0	2.0	3.0	4.0
5 BASED AIRCRAFT OVER 12500 LBS	0.0	0.0	0.0	0.0

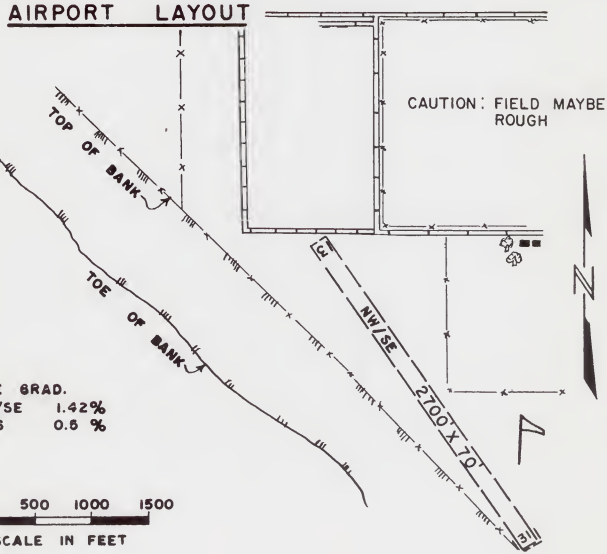
AIRCRAFT MIX AND CAPACITY FORECASTS

	1972	1977	1982	1987	1992
AIRCRAFT TYPE *A*	0	0	0	0	0
AIRCRAFT TYPE *B*	0	0	0	0	0
AIRCRAFT TYPE *C*	0	0	0	0	0
AIRCRAFT TYPE *D+E*	100	100	100	100	100
HOURLY CAPACITY VFR	77	88	99	99	99
HOURLY CAPACITY IFR	0	0	0	0	0
ANNUAL CAPACITY(000)	107	122	138	138	138

DEVELOPMENT COST SUMMARY

PLAN PERIOD	PARTICIPATION	LAND SIDE	AIR SIDE	TOTAL
BEFORE 1977	FEDERAL	$	$ 24,000	$ 24,000
	STATE/LOCAL		6,000	6,000
	TOTAL		30,000	30,000
1977	FEDERAL	5,000		5,000
	STATE/LOCAL	6,000		6,000
	TOTAL	11,000		11,000
1982	FEDERAL	3,000		3,000
	STATE/LOCAL	2,000		2,000
	TOTAL	5,000		5,000
1987	FEDERAL	1,000	6,000	7,000
	STATE/LOCAL	2,000	2,000	4,000
	TOTAL	3,000	8,000	11,000
1992	FEDERAL	3,000	178,000	181,000
	STATE/LOCAL	3,000	46,000	49,000
	TOTAL	6,000	224,000	230,000
TOTAL COSTS TO 1992	FEDERAL	12,000	208,000	220,000
	STATE/LOCAL	13,000	54,000	67,000
	TOTAL	25,000	262,000	287,000

STEVENSVILLE



MSASP AIRFIELD DEVELOPMENT COSTS IN THOUSANDS OF 1972 DOLLARS

STEVENSVILLE

	FED SHARE	TOTAL	FED GRANTS	STATE/LOCAL
BEFORE 1977				
1 LIGHTING & BEACON	79.46	30.20	23.99	6.20
TOTAL ($000)		30.20	24.00	6.20
1987				
2 NDB	79.46	8.00	6.35	1.64
TOTAL ($000)		8.00	6.36	1.64
1992				
3 PAVING	79.46	224.00	177.99	46.00
TOTAL ($000)		224.00	177.99	46.01
TOTAL PROJECT COSTS		262.21	208.35	53.87

AIRSIDE

FEDERAL SHARE OF THE PROJECT COSTS

	FED SHARE	1977	1982	1987	1992
1 GA TERMINAL BUILDING AREA(SF)	0.00	0.	0.	0.	0.
2 GA AIRCRAFT LOADING POSITIONS(NUMBER)	0.00	0.	0.	0.	0.
3 GA AC LOADING & BYPASS APRON AREA(SY)	79.46	1621.	810.	0.	810.
4 ITINERANT AIRCRAFT PARKING AREA(SY)	79.46	2431.	1216.	0.	1216.
5 GA BASED AIRCRAFT TIE-DOWN AREA(SY)	79.46	419.	417.	417.	417.
6 GA CONV HANGAR BLDG AND APRON AREA(SY)	79.46	162.	162.	162.	162.
7 GA *T* HANGAR BLDG & APRON AREA(SY)	79.46	322.	322.	322.	322.
8 GA PUBLIC VEHICULAR PARKING SPACE(NO.)	0.00	0.	0.	0.	0.
9 GA PUBLIC VEHICULAR PARKING AREA(SY)	0.00	0.	0.	0.	0.
10 AIRPORT MAINTENANCE APRON AREA(SY)	79.46	272.	86.	100.	114.
11 AIRPORT MAINTENANCE BUILDING(SF)	0.00	0.	0.	0.	0.
TOTAL IN THOUSANDS OF DOLLARS		5.2	3.0	1.0	3.0

LANDSIDE

PROJECT COST LESS FEDERAL GRANTS

	FED SHARE	1977	1982	1987	1992
1 GA TERMINAL BUILDING AREA(SF)	0.00	0.	0.	0.	0.
2 GA AIRCRAFT LOADING POSITIONS(NUMBER)	0.00	0.	0.	0.	0.
3 GA AC LOADING & BYPASS APRON AREA(SY)	79.46	419.	209.	0.	209.
4 ITINERANT AIRCRAFT PARKING AREA(SY)	79.46	628.	314.	0.	314.
5 GA BASED AIRCRAFT TIE-DOWN AREA(SY)	79.46	108.	107.	107.	107.
6 GA CONV HANGAR BLDG AND APRON AREA(SY)	79.46	246.	246.	246.	246.
7 GA *T* HANGAR BLDG & APRON AREA(SY)	79.46	286.	286.	286.	286.
8 GA PUBLIC VEHICULAR PARKING SPACE(NO.)	0.00	0.	0.	0.	0.
9 GA PUBLIC VEHICULAR PARKING AREA(SY)	0.00	374.	748.	748.	1497.
10 AIRPORT MAINTENANCE APRON AREA(SY)	79.46	70.	22.	25.	29.
11 AIRPORT MAINTENANCE BUILDING(SF)	0.00	95.	30.	35.	40.
TOTAL IN THOUSANDS OF DOLLARS		5.6	2.0	1.5	2.7

SUPERIOR

Superior is situated near the Clarks Ford River between the Ninemile Divide and the Bitterroot Range of western Montana. Interstate 90 serves as access to Missoula, which is 57 miles to the southeast.

The municiapl County airport is two miles southeast of town off Interstate 90. Light, private aircraft is forecasted. NASP entry for all periods is based upon the emergency function of the airport.

Facility Requirements

The 1977 benchmark period will require a small amount of land side expansion. A runway extnesion is needed before 1977.

Name: SUPERIOR

Site Number:. 12516.1

County:. MINERAL

District: 11

PEAK HOUR IFR AND VFR DEMAND FORECASTS

	1977	1982	1987	1992
SUPERIOR MONTANA				
TOTAL PEAK HOUR VFR DEMAND	5.	6.	7.	9.
GA IFR PEAK HOUR DEMAND	0.	0.	1.	1.

OPERATIONAL DATA

DEMAND FORECAST INDICATORS

	1977	1982	1987	1992
1 TOTAL GA ANNUAL OPERATIONS	2330.0	2670.0	3330.0	4000.0
2 GA PEAK HOUR OPERATIONS	5.0	6.0	7.0	9.0
3 PERCENT GA ITINERANT OPERATIONS	30.0	30.0	30.0	30.0
4 BASED AIRCRAFT UNDER 12500 LBS	5.0	6.0	7.0	8.0
5 BASED AIRCRAFT OVER 12500 LBS	0.0	0.0	0.0	0.0

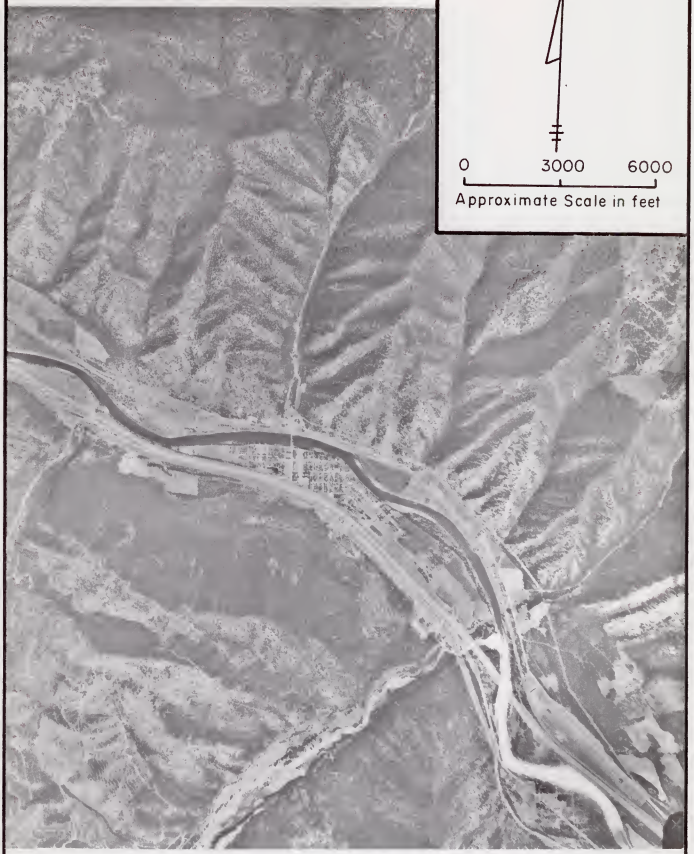
AIRCRAFT MIX AND CAPACITY FORECASTS

	1972	1977	1982	1987	1992
AIRCRAFT TYPE *A*	0	0	0	0	0
AIRCRAFT TYPE *B*	0	0	0	0	0
AIRCRAFT TYPE *C*	0	0	0	0	0
AIRCRAFT TYPE *D+E*	100	100	100	100	100
HOURLY CAPACITY VFR	85	92	99	99	99
HOURLY CAPACITY IFR	0	0	0	0	0
ANNUAL CAPACITY(000)	118	128	138	138	138

DEVELOPMENT COST SUMMARY

PLAN PERIOD	PARTICIPATION	LAND SIDE	AIR SIDE	TOTAL
BEFORE 1977	FEDERAL	$	$ 6,000	$ 6,000
	STATE/LOCAL		2,000	2,000
	TOTAL		8,000	8,000
1977	FEDERAL	5,000		5,000
	STATE/LOCAL	6,000		6,000
	TOTAL	11,000		11,000
1982	FEDERAL	1,000		1,000
	STATE/LOCAL	1,000		1,000
	TOTAL	2,000		2,000
1987	FEDERAL	1,000		1,000
	STATE/LOCAL	1,000		1,000
	TOTAL	2,000		2,000
1992	FEDERAL	1,000		1,000
	STATE/LOCAL	2,000		2,000
	TOTAL	3,000		3,000
TOTAL COSTS TO 1992	FEDERAL	8,000	6,000	14,000
	STATE/LOCAL	10,000	2,000	12,000
	TOTAL	18,000	8,000	26,000

SUPERIOR



MSASP AIRFIELD DEVELOPMENT COSTS IN THOUSANDS OF 1972 DOLLARS

SUPERIOR

AIRSIDE

	FED SHARE	TOTAL	FED GRANTS	STATE/LOCAL
BEFORE 1977				
1 EXTEND RUNWAY(12-30)				
A EARTH WORK	79.46	0.55	0.44	0.11
B SITE PREPARATION	79.46	0.36	0.29	0.07
C EASEMENTS	79.46	0.05	0.03	0.01
D PAVING	79.46	6.67	5.29	1.37
E LIGHTING	79.46	0.70	0.55	0.14
TOTAL ($000)		8.36	6.65	1.73
TOTAL PROJECT COSTS		8.36	6.65	1.73

LANDSIDE

FEDERAL SHARE OF THE PROJECT COSTS

	FED SHARE	1977	1982	1987	1992
1 GA TERMINAL BUILDING AREA(SF)	0.00	0.	0.	0.	0.
2 GA AIRCRAFT LOADING POSITIONS(NUMBER)	0.00	0.	0.	0.	0.
3 GA AC LOADING & BYPASS APRON AREA(SY)	79.46	810.	0.	0.	0.
4 ITINERANT AIRCRAFT PARKING AREA(SY)	79.46	1216.	0.	0.	0.
5 GA BASED AIRCRAFT TIE-DOWN AREA(SY)	79.46	2088.	417.	417.	417.
6 GA CONV HANGAR BLDG AND APRON AREA(SY)	79.46	810.	162.	162.	162.
7 GA #T# HANGAR BLDG & APRON AREA(SY)	79.46	0.	0.	0.	0.
8 GA PUBLIC VEHICULAR PARKING SPACE(NO.)	0.00	0.	0.	0.	0.
9 GA PUBLIC VEHICULAR PARKING AREA(SY)	0.00	0.	0.	0.	0.
10 AIRPORT MAINTENANCE APRON AREA(SY)	79.46	333.	49.	94.	96.
11 AIRPORT MAINTENANCE BUILDING(SF)	0.00	0.	0.	0.	0.
TOTAL IN THOUSANDS OF DOLLARS		5.3	0.6	0.7	0.7

PROJECT COST LESS FEDERAL GRANTS

	FED SHARE	1977	1982	1987	1992
1 GA TERMINAL BUILDING AREA(SF)	0.00	0.	0.	0.	0.
2 GA AIRCRAFT LOADING POSITIONS(NUMBER)	0.00	0.	0.	0.	0.
3 GA AC LOADING & BYPASS APRON AREA(SY)	79.46	209.	0.	0.	0.
4 ITINERANT AIRCRAFT PARKING AREA(SY)	79.46	314.	0.	0.	0.
5 GA BASED AIRCRAFT TIE-DOWN AREA(SY)	79.46	539.	107.	107.	107.
6 GA CONV HANGAR BLDG AND APRON AREA(SY)	79.46	1229.	246.	246.	246.
7 GA #T# HANGAR BLDG & APRON AREA(SY)	79.46	0.	0.	0.	0.
8 GA PUBLIC VEHICULAR PARKING SPACE(NO.)	0.00	0.	0.	0.	0.
9 GA PUBLIC VEHICULAR PARKING AREA(SY)	0.00	374.	748.	748.	1497.
10 AIRPORT MAINTENANCE APRON AREA(SY)	79.46	86.	12.	24.	24.
11 AIRPORT MAINTENANCE BUILDING(SF)	0.00	117.	17.	33.	33.
TOTAL IN THOUSANDS OF DOLLARS		6.2	1.1	1.2	1.9

SWEETGRASS

The town of Sweetgrass is on the U. S. - Canadian border, 20 miles east of the Blackfeet Indian Reservation and 35 miles north of Shelby on Interstate 15.

This airport serves as a border crossing airstrip. Only small light planes (D&E) will operate from this facility.

Facility Requirements

The present runway should be extended before 1977. A road relocation will be the large cost item.

Name: SWEETGRASS

Site Number:. 12518

County:. TOOLE

District:. 5

PEAK HOUR IFR AND VFR DEMAND FORECASTS

	1977	1982	1987	1992
SWEETGRASS, MONTANA				
TOTAL PEAK HOUR VFR DEMAND	1.	1.	1.	1.
GA IFR PEAK HOUR DEMAND	0.	0.	0.	0.

OPERATIONAL DATA

DEMAND FORECAST INDICATORS	1977	1982	1987	1992
1 TOTAL GA ANNUAL OPERATIONS	800.0	900.0	1000.0	1200.0
2 GA PEAK HOUR OPERATIONS	1.0	2.0	2.0	2.0
3 PERCENT GA ITINERANT OPERATIONS	100.0	100.0	75.0	60.0
4 BASED AIRCRAFT UNDER 12500 LBS	1.0	1.0	2.0	2.0
5 BASED AIRCRAFT OVER 12500 LBS	0.0	0.0	0.0	0.0

AIRCRAFT MIX AND CAPACITY FORECASTS

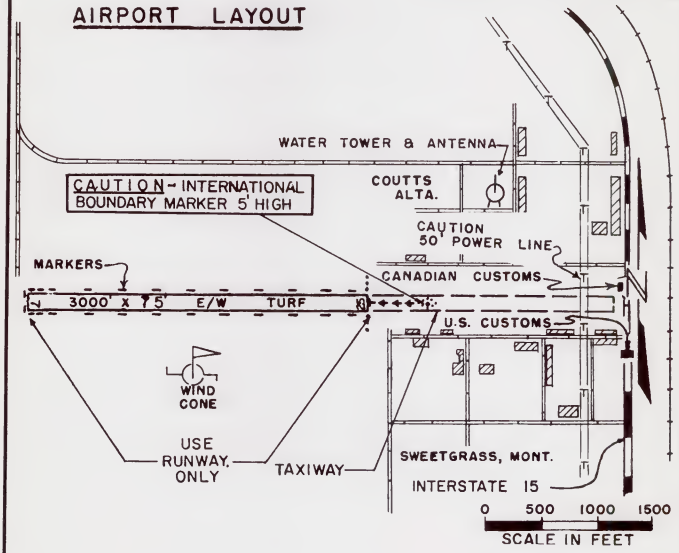
	1972	1977	1982	1987	1992
AIRCRAFT TYPE *A*	0	0	0	0	0
AIRCRAFT TYPE *B*	0	0	0	0	0
AIRCRAFT TYPE *C*	0	0	0	0	0
AIRCRAFT TYPE *D+E*	100	100	100	100	100
HOURLY CAPACITY VFR	77	88	99	99	99
HOURLY CAPACITY IFR	0	0	0	0	0
ANNUAL CAPACITY(000)	107	122	138	138	138

DEVELOPMENT COST SUMMARY

PLAN PERIOD	PARTICIPATION	LAND SIDE	AIR SIDE	TOTAL
BEFORE 1977	FEDERAL	$	$	$
	STATE/LOCAL		13,000	13,000
	TOTAL		13,000	13,000
1977	FEDERAL			
	STATE/LOCAL	3,000		3,000
	TOTAL	3,000		3,000
1982	FEDERAL			
	STATE/LOCAL	3,000		3,000
	TOTAL	3,000		3,000
1987	FEDERAL			
	STATE/LOCAL	2,000		2,000
	TOTAL	2,000		2,000
1992	FEDERAL			
	STATE/LOCAL			
	TOTAL			
TOTAL COSTS TO 1992	FEDERAL			
	STATE/LOCAL	8,000	13,000	21,000
	TOTAL	8,000	13,000	21,000

SWEETGRASS

AIRPORT LAYOUT



MSASP AIRFIELD DEVELOPMENT COSTS IN THOUSANDS OF 1972 DOLLARS

SWEETGRASS

	FED SHARE	TOTAL	FED GRANTS	STATE/LOCAL
BEFORE 1977				
1 EXTEND RUNWAY(7-25)				
A EARTH WORK	0.00	6.60	0.00	6.60
B LAND ACQUISITION	0.00	2.26	0.00	2.26
C EASEMENTS	0.00	0.56	0.00	0.56
D SITE PREPARATION	0.00	3.75	0.00	3.75
TOTAL ($000)		13.18	0.01	13.18
TOTAL PROJECT COSTS		13.18	0.01	13.18

AIRSIDE

FEDERAL SHARE OF THE PROJECT COSTS

	FED SHARE	1977	1982	1987	1992
1 GA TERMINAL BUILDING AREA(SF)	0.00	0.	0.	0.	0.
2 GA AIRCRAFT LOADING POSITIONS(NUMBER)	0.00	0.	0.	0.	0.
3 GA AC LOADING & BYPASS APRON AREA(SY)	0.00	0.	0.	0.	0.
4 ITINERANT AIRCRAFT PARKING AREA(SY)	0.00	0.	0.	0.	0.
5 GA BASED AIRCRAFT TIE-DOWN AREA(SY)	0.00	0.	0.	0.	0.
6 GA CONV HANGAR BLDG AND APRON AREA(SY)	0.00	0.	0.	0.	0.
7 GA *T* HANGAR BLDG & APRON AREA(SY)	0.00	0.	0.	0.	0.
8 GA PUBLIC VEHICULAR PARKING SPACE(NO.)	0.00	0.	0.	0.	0.
9 GA PUBLIC VEHICULAR PARKING AREA(SY)	0.00	0.	0.	0.	0.
10 AIRPORT MAINTENANCE APRON AREA(SY)	0.00	0.	0.	0.	0.
11 AIRPORT MAINTENANCE BUILDING(SF)	0.00	0.	0.	0.	0.
TOTAL IN THOUSANDS OF DOLLARS		0.0	0.0	0.0	0.0

LANDSIDE

PROJECT COST LESS FEDERAL GRANTS

	FED SHARE	1977	1982	1987	1992
1 GA TERMINAL BUILDING AREA(SF)	0.00	0.	0.	0.	0.
2 GA AIRCRAFT LOADING POSITIONS(NUMBER)	0.00	0.	0.	0.	0.
3 GA AC LOADING & BYPASS APRON AREA(SY)	0.00	0.	1020.	0.	0.
4 ITINERANT AIRCRAFT PARKING AREA(SY)	0.00	0.	1530.	0.	0.
5 GA BASED AIRCRAFT TIE-DOWN AREA(SY)	0.00	528.	0.	525.	0.
6 GA CONV HANGAR BLDG AND APRON AREA(SY)	0.00	408.	0.	408.	0.
7 GA *T* HANGAR BLDG & APRON AREA(SY)	0.00	408.	0.	408.	0.
8 GA PUBLIC VEHICULAR PARKING SPACE(NO.)	0.00	0.	0.	0.	0.
9 GA PUBLIC VEHICULAR PARKING AREA(SY)	0.00	748.	748.	0.	0.
10 AIRPORT MAINTENANCE APRON AREA(SY)	0.00	144.	18.	18.	36.
11 AIRPORT MAINTENANCE BUILDING(SF)	0.00	40.	5.	5.	10.
TOTAL IN THOUSANDS OF DOLLARS		2.5	3.3	1.6	0.1

TERRY

The town of Terry is situated in east central Montana on the Yellowstone River. Miles City is 39 miles southwest, and Glendive is 39 miles to the northeast. Interstate 90 passes Terry one mile south.

The airport is one-half mile south of town. Aircraft type 'D & E' have been forcasted. A master plan study is underway. NASP entry is based upon recent and expected activity.

Facility Requirements

The 1977 interval will require a small amount of land side addition. Runway (10-28) should be extended, lighted and paved before 1977.

NAVAIDS: An NDB should be considered for installation by 1992, to accommodate the forecasted IFR traffic.

Name: TERRY

Site Number:. 12523

County:. PRAIRIE

District:. 2

PEAK HOUR IFR AND VFR DEMAND FORECASTS

	1977	1982	1987	1992
TERRY MONTANA				
TOTAL PEAK HOUR VFR DEMAND	3.	4.	5.	6.
GA IFR PEAK HOUR DEMAND	0.	0.	0.	1.

OPERATIONAL DATA

DEMAND FORECAST INDICATORS

	1977	1982	1987	1992
1 TOTAL GA ANNUAL OPERATIONS	2660±0	3340±0	4000±0	4660±0
2 GA PEAK HOUR OPERATIONS	3±0	4±0	5±0	6±0
3 PERCENT GA ITINERANT OPERATIONS	30±0	30±0	30±0	30±0
4 BASED AIRCRAFT UNDER 12500 LBS	3±0	3±0	4±0	4±0
5 BASED AIRCRAFT OVER 12500 LBS	0±0	0±0	0±0	0±0

AIRCRAFT MIX AND CAPACITY FORECASTS

	1972	1977	1982	1987	1992
AIRCRAFT TYPE *A*	0	0	0	0	0
AIRCRAFT TYPE *B*	0	0	0	0	0
AIRCRAFT TYPE *C*	0	0	0	0	0
AIRCRAFT TYPE *D+E*	100	100	100	100	100
HOURLY CAPACITY VFR	85	92	99	99	99
HOURLY CAPACITY IFR	0	0	0	0	0
ANNUAL CAPACITY(000)	118	128	138	138	138

DEVELOPMENT COST SUMMARY

PLAN PERIOD	PARTICIPATION	LAND SIDE	AIR SIDE	TOTAL
BEFORE 1977	FEDERAL	$	$ 155,000	$ 155,000
	STATE/LOCAL		40,000	40,000
	TOTAL		195,000	195,000
1977	FEDERAL	2,000		2,000
	STATE/LOCAL	4,000		4,000
	TOTAL	6,000		6,000
1982	FEDERAL	1,000		1,000
	STATE/LOCAL	1,000		1,000
	TOTAL	2,000		2,000
1987	FEDERAL	1,000		1,000
	STATE/LOCAL	1,000		1,000
	TOTAL	2,000		2,000
1992	FEDERAL		6,000	6,000
	STATE/LOCAL	1,000	2,000	3,000
	TOTAL	1,000	8,000	9,000
TOTAL COSTS TO 1992	FEDERAL	4,000	161,000	165,000
	STATE/LOCAL	7,000	42,000	49,000
	TOTAL	11,000	203,000	214,000

TERRY

MSASP AIRFIELD DEVELOPMENT COSTS IN THOUSANDS OF 1972 DOLLARS

TERRY

	FED SHARE	TOTAL	FED GRANTS	STATE/LOCAL
BEFORE 1977				
1 EXTEND RUNWAY(10-28)				
A EARTHWORK	79.46	6.15	4.88	1.26
B LAND ACQUISITION	79.46	2.26	1.79	0.46
C EASEMENTS	79.46	0.56	0.44	0.11
D SITE PREPARATION	79.46	0.60	0.47	0.12
E OBSTRUCTION REMOVAL	79.46	0.60	0.47	0.12
2 MIRL & BEACON	79.46	34.70	27.57	7.12
3 PAVE RUNWAY(10/28)	79.46	150.00	119.18	30.81
TOTAL ($000)		194.90	154.87	40.06
1992				
4 NDB	79.46	8.00	6.35	1.64
TOTAL ($000)		8.00	6.36	1.64
TOTAL PROJECT COSTS		202.90	161.24	41.70

SIDE A

FEDERAL SHARE OF THE PROJECT COSTS

	FED SHARE	1977	1982	1987	1992
1 GA TERMINAL BUILDING AREA(SF)	0.00	0.	0.	0.	0.
2 GA AIRCRAFT LOADING POSITIONS(NUMBER)	0.00	0.	0.	0.	0.
3 GA AC LOADING & BYPASS APRON AREA(SY)	79.46	0.	810.	0.	0.
4 ITINERANT AIRCRAFT PARKING AREA(SY)	79.46	0.	0.	0.	0.
5 GA BASED AIRCRAFT TIE-DOWN AREA(SY)	79.46	1254.	0.	417.	0.
6 GA CONV HANGAR BLDG AND APRON AREA(SY)	79.46	486.	0.	162.	0.
7 GA *T* HANGAR BLDG & APRON AREA(SY)	79.46	0.	0.	0.	0.
8 GA PUBLIC VEHICULAR PARKING SPACE(NO.)	0.00	0.	0.	0.	0.
9 GA PUBLIC VEHICULAR PARKING AREA(SY)	0.00	0.	0.	0.	0.
10 AIRPORT MAINTENANCE APRON AREA(SY)	79.46	380.	97.	94.	94.
11 AIRPORT MAINTENANCE BUILDING(SF)	0.00	0.	0.	0.	0.
TOTAL IN THOUSANDS OF DOLLARS		2.1	0.9	0.7	0.1

PROJECT COST LESS FEDERAL GRANTS

	FED SHARE	1977	1982	1987	1992
1 GA TERMINAL BUILDING AREA(SF)	0.00	0.	0.	0.	0.
2 GA AIRCRAFT LOADING POSITIONS(NUMBER)	0.00	0.	0.	0.	0.
3 GA AC LOADING & BYPASS APRON AREA(SY)	79.46	0.	209.	0.	0.
4 ITINERANT AIRCRAFT PARKING AREA(SY)	79.46	0.	0.	0.	0.
5 GA BASED AIRCRAFT TIE-DOWN AREA(SY)	79.46	324.	0.	107.	0.
6 GA CONV HANGAR BLDG AND APRON AREA(SY)	79.46	738.	0.	246.	0.
7 GA *T* HANGAR BLDG & APRON AREA(SY)	79.46	0.	0.	0.	0.
8 GA PUBLIC VEHICULAR PARKING SPACE(NO.)	0.00	0.	0.	0.	0.
9 GA PUBLIC VEHICULAR PARKING AREA(SY)	0.00	2245.	748.	748.	748.
10 AIRPORT MAINTENANCE APRON AREA(SY)	79.46	98.	25.	24.	24.
11 AIRPORT MAINTENANCE BUILDING(SF)	0.00	133.	34.	33.	33.
TOTAL IN THOUSANDS OF DOLLARS		3.5	1.0	1.2	0.8

LANDSIDE

THOMPSON FALLS

Thompson Falls is situated on the Clark Fork River between the Cabinet and Coeur D'Alene Mountains of west Montana. The town is 32 miles south of the Noxon Rapids Dam on State Route 200.

The airport is located three miles southeast of town off State Route 200. Some small 'C' type aircraft activity has been forecasted beginning in 1982.

Facility Requirements

Slight land side expansion is needed in 1977. Air side additions will include paving and extension before 1977.

Name: THOMPSON FALLS

Site Number:. 12525

County:. SANDERS

District:. 11

PEAK HOUR IFR AND VFR DEMAND FORECASTS

	1977	1982	1987	1992
THOMPSON FALLS, MONTANA				
TOTAL PEAK HOUR VFR DEMAND	3.	4.	5.	6.
GA IFR PEAK HOUR DEMAND	0.	0.	0.	1.

OPERATIONAL DATA

DEMAND FORECAST INDICATORS

	1977	1982	1987	1992
1 TOTAL GA ANNUAL OPERATIONS	1670.0	2000.0	2330.0	2670.0
2 GA PEAK HOUR OPERATIONS	3.0	4.0	5.0	6.0
3 PERCENT GA ITINERANT OPERATIONS	30.0	30.0	30.0	30.0
4 BASED AIRCRAFT UNDER 12500 LBS	4.0	4.0	5.0	5.0
5 BASED AIRCRAFT OVER 12500 LBS	0.0	0.0	0.0	0.0

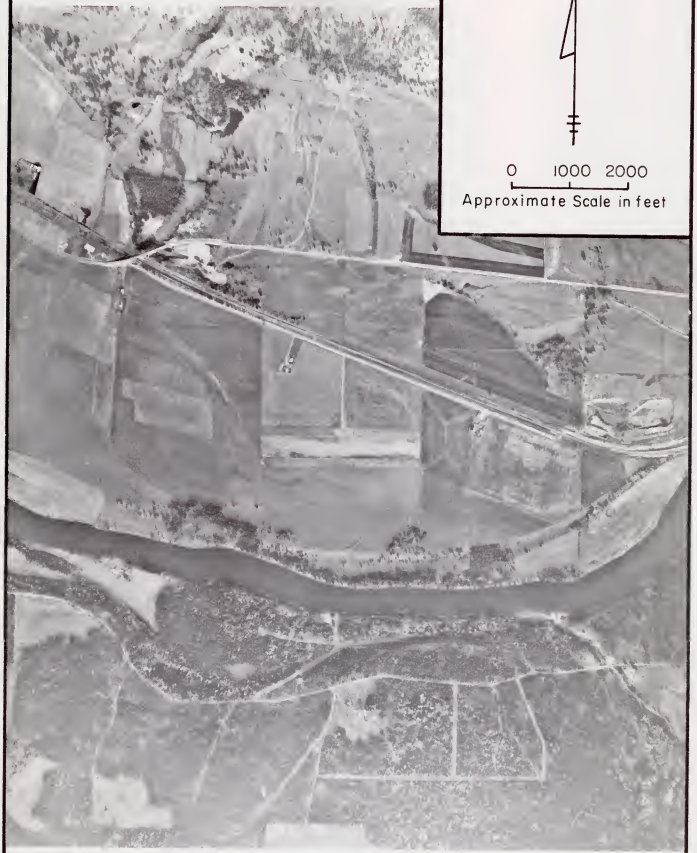
AIRCRAFT MIX AND CAPACITY FORECASTS

	1972	1977	1982	1987	1992
AIRCRAFT TYPE *A*	0	0	0	0	0
AIRCRAFT TYPE *B*	0	0	1	2	3
AIRCRAFT TYPE *C*	0	0	1	2	3
AIRCRAFT TYPE *D+E*	100	100	99	98	97
HOURLY CAPACITY VFR	85	92	99	99	99
HOURLY CAPACITY IFR	0	0	0	0	0
ANNUAL CAPACITY(000)	118	128	138	138	138

DEVELOPMENT COST SUMMARY

PLAN PERIOD	PARTICIPATION	LAND SIDE	AIR SIDE	TOTAL
BEFORE 1977	FEDERAL	$	$	$
	STATE/LOCAL		164,000	164,000
	TOTAL		164,000	164,000
1977	FEDERAL			
	STATE/LOCAL	7,000		7,000
	TOTAL	7,000		7,000
1982	FEDERAL			
	STATE/LOCAL	2,000		2,000
	TOTAL	2,000		2,000
1987	FEDERAL			
	STATE/LOCAL	2,000		2,000
	TOTAL	2,000		2,000
1992	FEDERAL			
	STATE/LOCAL	1,000		1,000
	TOTAL	1,000		1,000
TOTAL COSTS TO 1992	FEDERAL			
	STATE/LOCAL	12,000	164,000	176,000
	TOTAL	12,000	164,000	176,000

THOMPSON FALLS



MSASP AIRFIELD DEVELOPMENT COSTS IN THOUSANDS OF 1972 DOLLARS

THOMPSON FALLS

AIRSIDE

	FED SHARE	TOTAL	FED GRANTS	STATE/LOCAL
BEFORE 1977				
1 EXTEND RUNWAY(7-25)				
A EARTHWORK	0.00	7.80	0.00	7.80
B LAND ACQUISITION	0.00	2.70	0.00	2.70
C EASEMENTS	0.00	0.56	0.00	0.56
D SITE PREPARATION	0.00	0.36	0.00	0.36
E DRAINAGE	0.00	1.50	0.00	1.50
F PAVE RUNWAY(7/25)	0.00	150.00	0.00	150.00
G MIRL	0.00	1.00	0.00	1.00
TOTAL ($000)		163.95	0.03	163.95
TOTAL PROJECT COSTS		163.95	0.03	163.95

LANDSIDE

FEDERAL SHARE OF THE PROJECT COSTS

	FED SHARE	1977	1982	1987	1992
1 GA TERMINAL BUILDING AREA(SF)	0.00	0.	0.	0.	0.
2 GA AIRCRAFT LOADING POSITIONS(NUMBER)	0.00	0.	0.	0.	0.
3 GA AC LOADING & BYPASS APRON AREA(SY)	0.00	0.	0.	0.	0.
4 ITINERANT AIRCRAFT PARKING AREA(SY)	0.00	0.	0.	0.	0.
5 GA BASED AIRCRAFT TIE-DOWN AREA(SY)	0.00	0.	0.	0.	0.
6 GA CONV HANGAR BLDG AND APRON AREA(SY)	0.00	0.	0.	0.	0.
7 GA *T* HANGAR BLDG & APRON AREA(SY)	0.00	0.	0.	0.	0.
8 GA PUBLIC VEHICULAR PARKING SPACE(NO.)	0.00	0.	0.	0.	0.
9 GA PUBLIC VEHICULAR PARKING AREA(SY)	0.00	0.	0.	0.	0.
10 AIRPORT MAINTENANCE APRON AREA(SY)	0.00	0.	0.	0.	0.
11 AIRPORT MAINTENANCE BUILDING(SF)	0.00	0.	0.	0.	0.
TOTAL IN THOUSANDS OF DOLLARS		0.0	0.0	0.0	0.0

PROJECT COST LESS FEDERAL GRANTS

	FED SHARE	1977	1982	1987	1992
1 GA TERMINAL BUILDING AREA(SF)	0.00	0.	0.	0.	0.
2 GA AIRCRAFT LOADING POSITIONS(NUMBER)	0.00	0.	0.	0.	0.
3 GA AC LOADING & BYPASS APRON AREA(SY)	0.00	1020.	0.	0.	0.
4 ITINERANT AIRCRAFT PARKING AREA(SY)	0.00	0.	0.	0.	0.
5 GA BASED AIRCRAFT TIE-DOWN AREA(SY)	0.00	798.	525.	525.	525.
6 GA CONV HANGAR BLDG AND APRON AREA(SY)	0.00	0.	0.	0.	0.
7 GA *T* HANGAR BLDG & APRON AREA(SY)	0.00	1823.	608.	608.	608.
8 GA PUBLIC VEHICULAR PARKING SPACE(NO.)	0.00	0.	0.	0.	0.
9 GA PUBLIC VEHICULAR PARKING AREA(SY)	0.00	348.	0.	0.	0.
10 AIRPORT MAINTENANCE APRON AREA(SY)	0.00	419.	61.	119.	121.
11 AIRPORT MAINTENANCE BUILDING(SF)	0.00	117.	17.	33.	33.
TOTAL IN THOUSANDS OF DOLLARS		6.7	1.9	1.8	.9

THREE FORKS

The town is situated in western Montana three miles south of the headwaters of the Missouri River. Bozeman is 30 miles to the southeast and Butte is 53 miles to the west on Interstate 90.

The airport is one-half mile southwest of town off U. S. 10. 'D & E' aircraft type activity has been forecasted.

Facility Requirements

Some land side work is needed in 1977, with public vehicular parking area being the large cost item. The present runway needs to be extended before 1977.

NAVAIDS: An NDB should be considered for installation by 1982.

Name: THREE FORKS

Site Number:. 12529

County:. GALLATIN

Oistrict:. 9

PEAK HOUR IFR AND VFR DEMAND FORECASTS

	1977	1982	1987	1992
THREE FORKS MONTANA				
TOTAL PEAK HOUR VFR DEMAND	8.	9.	10.	11.
GA IFR PEAK HOUR DEMAND	0.	1.	1.	1.

OPERATIONAL DATA

DEMAND FORECAST INDICATORS	1977	1982	1987	1992
1 TOTAL GA ANNUAL OPERATIONS	3670.0	4000.0	4330.0	4670.0
2 GA PEAK HOUR OPERATIONS	8.0	9.0	10.0	11.0
3 PERCENT GA ITINERANT OPERATIONS	30.0	30.0	30.0	30.0
4 BASED AIRCRAFT UNDER 12500 LBS	6.0	6.0	7.0	7.0
5 BASED AIRCRAFT OVER 12500 LBS	0.0	0.0	0.0	0.0

AIRCRAFT MIX AND CAPACITY FORECASTS

	1972	1977	1982	1987	1992
AIRCRAFT TYPE *A*	0	0	0	0	0
AIRCRAFT TYPE *B*	0	0	0	0	0
AIRCRAFT TYPE *C*	0	0	0	0	0
AIRCRAFT TYPE *D*E*	100	100	100	100	100
HOURLY CAPACITY VFR	85	92	99	99	99
HOURLY CAPACITY IFR	0	0	0	0	0
ANNUAL CAPACITY(000)	118	128	138	138	138

DEVELOPMENT COST SUMMARY

PLAN PERIOD	PARTICIPATION	LAND SIDE	AIR SIDE	TOTAL
BEFORE 1977	FEDERAL	$	$ 21,000	$ 21,000
	STATE/LOCAL		5,000	5,000
	TOTAL		26,000	26,000
1977	FEDERAL	4,000		4,000
	STATE/LOCAL	8,000		8,000
	TOTAL	12,000		12,000
1982	FEDERAL		6,000	6,000
	STATE/LOCAL	1,000	2,000	3,000
	TOTAL	1,000	8,000	9,000
1987	FEDERAL			
	STATE/LOCAL	1,000		1,000
	TOTAL	1,000		1,000
1992	FEDERAL	2,000		2,000
	STATE/LOCAL	1,000		1,000
	TOTAL	3,000		3,000
TOTAL COSTS TO 1992	FEDERAL	6,000	27,000	33,000
	STATE/LOCAL	11,000	7,000	18,000
	TOTAL	17,000	34,000	51,000

THREE FORKS

MSASP AIRFIELD DEVELOPMENT COSTS IN THOUSANDS OF 1972 DOLLARS

THREE FORKS

AIRSIDE

	FED SHARE	TOTAL	FED GRANTS	STATE/LOCAL
BEFORE 1977				
1 EXTEND RUNWAY(1-19)				
A EARTH WORK	79.46	6.60	5.24	1.35
B LAND ACQUISITION	79.46	2.70	2.14	0.55
C EASEMENT	79.46	0.42	0.33	0.08
D SITE PREPARATION	79.46	3.60	2.86	0.73
E DRAINAGE	79.46	6.60	5.24	1.35
F EXTEND L1RL	79.46	6.30	5.00	1.29
TOTAL ($000)		26.24	20.86	5.41
1982				
2 NDB	79.46	8.00	6.35	1.64
TOTAL ($000)		8.00	6.36	1.64
TOTAL PROJECT COSTS		34.25	27.22	7.06

LANDSIDE

FEDERAL SHARE OF THE PROJECT COSTS

	FED SHARE	1977	1982	1987	1992
1 GA TERMINAL BUILDING AREA(SF)	0.00	0.	0.	0.	0.
2 GA AIRCRAFT LOADING POSITIONS(NUMBER)	0.00	0.	0.	0.	0.
3 GA AC LOADING & BYPASS APRON AREA(SY)	79.46	810.	0.	0.	810.
4 ITINERANT AIRCRAFT PARKING AREA(SY)	79.46	1216.	0.	0.	1216.
5 GA BASED AIRCRAFT TIE-DOWN AREA(SY)	79.46	0.	0.	0.	0.
6 GA CONV HANGAR BLDG AND APRON AREA(SY)	79.46	972.	0.	162.	0.
7 GA *T* HANGAR BLDG & APRON AREA(SY)	79.46	0.	0.	0.	0.
8 GA PUBLIC VEHICULAR PARKING SPACE(NO.)	0.00	0.	0.	0.	0.
9 GA PUBLIC VEHICULAR PARKIMG AREA(SY)	0.00	0.	0.	0.	0.
10 AIRPORT MAINTENANCE APRON AREA(SY)	79.46	525.	47.	47.	49.
11 AIRPORT MAINTENANCE BUILDING(SF)	0.00	0.	0.	0.	0.
TOTAL IN THOUSANDS OF DOLLARS		3.5	0.0	0.2	2.1

PROJECT COST LESS FEDERAL GRANTS

	FED SHARE	1977	1982	1987	1992
1 GA TERMINAL BUILDING AREA(SF)	0.00	0.	0.	0.	0.
2 GA AIRCRAFT LOADING POSITIONS(NUMBER)	0.00	0.	0.	0.	0.
3 GA AC LOADING & BYPASS APRON AREA(SY)	79.46	209.	0.	0.	209.
4 ITINERANT AIRCRAFT PARKING AREA(SY)	79.46	314.	0.	0.	314.
5 GA BASED AIRCRAFT TIE-DOWN AREA(SY)	79.46	0.	0.	0.	0.
6 GA CONV HANGAR BLDG AND APRON AREA(SY)	79.46	1475.	0.	246.	0.
7 GA *T* HANGAR BLDG & APRON AREA(SY)	79.46	0.	0.	0.	0.
8 GA PUBLIC VEHICULAR PARKING SPACE(NO.)	0.00	0.	0.	0.	0.
9 GA PUBLIC VEHICULAR PARKIMG AREA(SY)	0.00	5988.	748.	748.	748.
10 AIRPORT MAINTENANCE APRON AREA(SY)	79.46	135.	12.	12.	12.
11 AIRPORT MAINTENANCE BUILDING(SF)	0.00	184.	0.	17.	17.
TOTAL IN THOUSANDS OF DOLLARS		8.3	0.8	1.0	1.3

TIBER DAM

The Tiber Reservoir is located in northern Montana 30 miles southeast of Shelby. Access to the reservoir area is by an improved-gravelled road.

The airstrip is one-half mile southwest of the dam. The facility is for recreation use and only small private aircraft are forecasted.

Facility Requirements

Only minimal land side expansion is necessary.

Name: TIBER DAM

Site Number:. 12529.4

County:. LIBERTY

Oistrict:. 8

PEAK HOUR IFR AND VFR DEMAND FORECASTS

	1977	1982	1987	1992
TIBER DAM, MONTANA				
TOTAL PEAK HOUR VFR DEMAND	1.	1.	1.	2.
GA IFR PEAK HOUR DEMAND	0.	0.	0.	0.

OPERATIONAL DATA

DEMAND FORECAST INDICATORS	1977	1982	1987	1992
1 TOTAL GA ANNUAL OPERATIONS	200.0	300.0	400.0	500.0
2 GA PEAK HOUR OPERATIONS	1.0	1.0	1.0	2.0
3 PERCENT GA ITINERANT OPERATIONS	100.0	100.0	75.0	60.0
4 BASED AIRCRAFT UNDER 12500 LBS	0.0	0.0	1.0	1.0
5 BASED AIRCRAFT OVER 12500 LBS	0.0	0.0	0.0	0.0

AIRCRAFT MIX AND CAPACITY FORECASTS

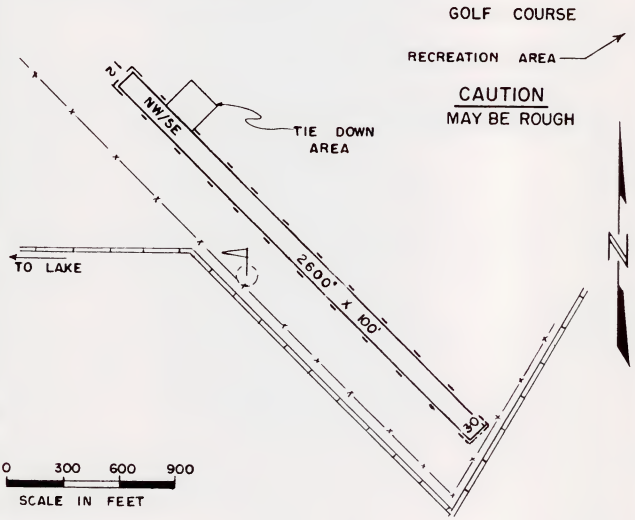
	1972	1977	1982	1987	1992
AIRCRAFT TYPE *A*	0	0	0	0	0
AIRCRAFT TYPE *B*	0	0	0	0	0
AIRCRAFT TYPE *C*	0	0	0	0	0
AIRCRAFT TYPE *D+E*	100	100	100	100	100
HOURLY CAPACITY VFR	85	92	99	99	99
HOURLY CAPACITY IFR	0	0	0	0	0
ANNUAL CAPACITY(000)	118	128	138	138	138

DEVELOPMENT COST SUMMARY

PLAN PERIOD	PARTICIPATION	LAND SIOE	AIR SIOE	TOTAL
BEFORE 1977	FEDERAL			
	STATE/LOCAL			
	TOTAL			
1977	FEDERAL	$	$	$
	STATE/LOCAL	1,000		1,000
	TOTAL	1,000		1,000
1982	FEDERAL			
	STATE/LOCAL			
	TOTAL			
1987	FEDERAL			
	STATE/LOCAL	2,000		2,000
	TOTAL	2,000		2,000
1992	FEDERAL			
	STATE/LOCAL	3,000		3,000
	TOTAL	3,000		3,000
TOTAL COSTS TO 1992	FEDERAL			
	STATE/LOCAL	6,000		6,000
	TOTAL	6,000		6,000

TIBER DAM

AIRPORT LAYOUT



TIBER DAM

NO AIR SIDE DEVELOPMENTS REQUIRED

LANDSIDE

FEDERAL SHARE OF THE PROJECT COSTS

	FED SHARE	1977	1982	1987	1992
1 GA TERMINAL BUILDING AREA(SF)	0.00	0.	0.	0.	0.
2 GA AIRCRAFT LOADING POSITIONS(NUMBER)	0.00	0.	0.	0.	0.
3 GA AC LOADING & BYPASS APRON AREA(SY)	0.00	0.	0.	0.	0.
4 ITINERANT AIRCRAFT PARKING AREA(SY)	0.00	0.	0.	0.	0.
5 GA BASED AIRCRAFT TIE-DOWN AREA(SY)	0.00	0.	0.	0.	0.
6 GA CONV HANGAR BLDG AND APRON AREA(SY)	0.00	0.	0.	0.	0.
7 GA *T* HANGAR BLDG & APRON AREA(SY)	0.00	0.	0.	0.	0.
8 GA PUBLIC VEHICULAR PARKING SPACE(NO.)	0.00	0.	0.	0.	0.
9 GA PUBLIC VEHICULAR PARKIMG AREA(SY)	0.00	0.	0.	0.	0.
10 AIRPORT MAINTENANCE APRON AREA(SY)	0.00	0.	0.	0.	0.
11 AIRPORT MAINTENANCE BUILDING(SF)	0.00	0.	0.	0.	0.
TOTAL IN THOUSANDS OF DOLLARS		0.0	0.0	0.0	0.0

PROJECT COST LESS FEDERAL GRANTS

	FED SHARE	1977	1982	1987	1992
1 GA TERMINAL BUILDING AREA(SF)	0.00	0.	0.	0.	0.
2 GA AIRCRAFT LOADING POSITIONS(NUMBER)	0.00	0.	0.	0.	0.
3 GA AC LOADING & BYPASS APRON AREA(SY)	0.00	0.	0.	0.	1020.
4 ITINERANT AIRCRAFT PARKING AREA(SY)	0.00	0.	0.	0.	1530.
5 GA BASED AIRCRAFT TIE-DOWN AREA(SY)	0.00	3.	0.	525.	0.
6 GA CONV HANGAR BLDG AND APRON AREA(SY)	0.00	0.	0.	408.	0.
7 GA *T* HANGAR BLDG & APRON AREA(SY)	0.00	0.	0.	608.	0.
8 GA PUBLIC VEHICULAR PARKING SPACE(NO.)	0.00	0.	0.	0.	0.
9 GA PUBLIC VEHICULAR PARKIMG AREA(SY)	0.00	748.	0.	0.	748.
10 AIRPORT MAINTENANCE APRON AREA(SY)	0.00	36.	18.	18.	18.
11 AIRPORT MAINTENANCE BUILDING(SF)	0.00	10.	5.	5.	5.
TOTAL IN THOUSANDS OF DOLLARS		0.8	0.0	1.6	3.3

TOWNSEND

The city is situated on the Missouri River south of the Canyon Ferry Lake in west Montana. Townsend is 32 miles south of Helena on U. S. 287 & 12.

The airport is located one mile east of town off U. S. 12. A small amount of 'C' type aircraft activity is expected in 1987.

Facility Requirements

A relatively small amount of land side expansion is necessary. Air side addition will consist of apron/taxiway paving, access road construction and obstruction removal.

NAVAIDS: An NDB should be considered for installation by 1982.

Name: TOWNSEND

Site Number:. 12531

County:. BROADWATER

District:. 8

PEAK HOUR IFR AND VFR DEMAND FORECASTS

	1977	1982	1987	1992
TOWNSEND, MONTANA				
TOTAL PEAK HOUR VFR DEMAND	7.	8.	10.	11.
GA IFR PEAK HOUR DEMAND	0.	1.	1.	1.

OPERATIONAL DATA

DEMAND FORECAST INDICATORS

	1977	1982	1987	1992
1 TOTAL GA ANNUAL OPERATIONS	3330.0	3670.0	4330.0	5000.0
2 GA PEAK HOUR OPERATIONS	7.0	8.0	10.0	11.0
3 PERCENT GA ITINERANT OPERATIONS	30.0	30.0	30.0	30.0
4 BASED AIRCRAFT UNDER 12500 LBS	5.0	6.0	7.0	8.0
5 BASED AIRCRAFT OVER 12500 LBS	0.0	0.0	0.0	0.0

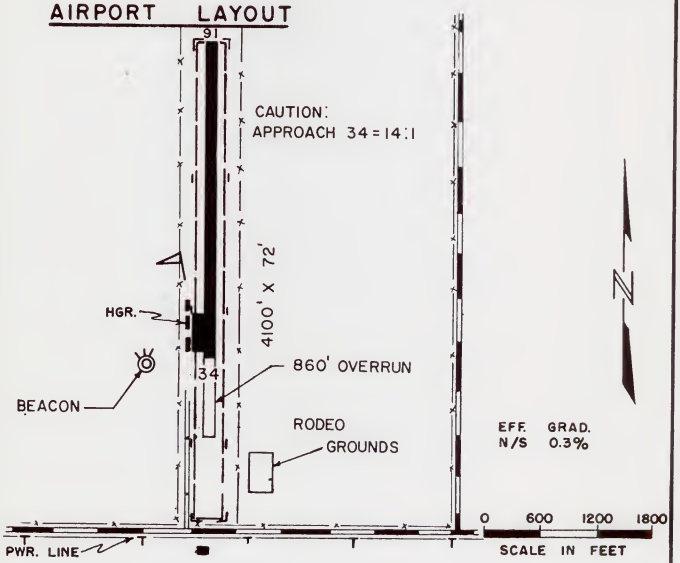
AIRCRAFT MIX AND CAPACITY FORECASTS

	1972	1977	1982	1987	1992
AIRCRAFT TYPE *A*	0	0	0	0	0
AIRCRAFT TYPE *B*	0	0	0	0	0
AIRCRAFT TYPE *C*	0	0	0	1	2
AIRCRAFT TYPE *D+E*	100	100	100	99	98
HOURLY CAPACITY VFR	77	88	99	99	99
HOURLY CAPACITY IFR	0	0	0	0	0
ANNUAL CAPACITY(000)	107	122	138	138	138

DEVELOPMENT COST SUMMARY

PLAN PERIOD	PARTICIPATION	LAND SIDE	AIR SIDE	TOTAL
BEFORE 1977	FEDERAL			
	STATE/LOCAL			
	TOTAL			
1977	FEDERAL	$ 4,000	$ 16,000	$ 20,000
	STATE/LOCAL	6,000	16,000	22,000
	TOTAL	10,000	32,000	42,000
1982	FEDERAL	1,000	6,000	7,000
	STATE/LOCAL	1,000	2,000	3,000
	TOTAL	2,000	8,000	10,000
1987	FEDERAL	1,000		1,000
	STATE/LOCAL	2,000		2,000
	TOTAL	3,000		3,000
1992	FEDERAL	1,000		1,000
	STATE/LOCAL	1,000		1,000
	TOTAL	2,000		2,000
TOTAL COSTS TO 1992	FEDERAL	7,000	22,000	29,000
	STATE/LOCAL	10,000	18,000	28,000
	TOTAL	17,000	40,000	57,000

TOWNSEND


AIRPORT LAYOUT
91
CAUTION:
APPROACH 34 = 14:1
4100' X 72'
HGR.
34
860' OVERRUN
BEACON
RODEO
GROUNDS
EFF. GRAD.
N/S 0.3%
0 600 1200 1800
PWR. LINE
SCALE IN FEET

MSASP AIRFIELD DEVELOPMENT COSTS IN THOUSANDS OF 1972 DOLLARS

TOWNSEND, TOWNSEND

AIRSIDE

		FED SHARE	TOTAL	FED GRANTS	STATE/LOCAL
	1977				
1	PAVE CONN. TAXIWAY	79.46	7.50	5.95	1.54
2	PAVE APRONS	79.46	10.00	7.94	2.05
3	CONSTRUCT ACCESS ROAD	0.00	12.00	0.00	12.00
4	OBSTRUCTION REMOVAL	79.46	3.00	2.38	0.61
	TOTAL ($000)		32.51	16.30	16.23
	1982				
5	NDB	79.46	8.00	6.35	1.64
	TOTAL ($000)		8.00	6.36	1.64
	TOTAL PROJECT COSTS		40.52	22.67	17.87

LANDSIDE

FEDERAL SHARE OF THE PROJECT COSTS

		FED SHARE	1977	1982	1987	1992
1	GA TERMINAL BUILDING AREA(SF)	0.00	0.	0.	0.	0.
2	GA AIRCRAFT LOADING POSITIONS(NUMBER)	0.00	0.	0.	0.	0.
3	GA AC LOADING & BYPASS APRON AREA(SY)	79.46	0.	0.	0.	0.
4	ITINERANT AIRCRAFT PARKING AREA(SY)	79.46	0.	0.	0.	0.
5	GA BASED AIRCRAFT TIE-DOWN AREA(SY)	79.46	1468.	417.	417.	417.
6	GA CONV HANGAR BLDG AND APRON AREA(SY)	79.46	0.	0.	0.	0.
7	GA +T+ HANGAR BLDG & APRON AREA(SY)	79.46	1609.	322.	322.	322.
8	GA PUBLIC VEHICULAR PARKING SPACE(NO.)	0.00	0.	0.	0.	0.
9	GA PUBLIC VEHICULAR PARKING AREA(SY)	0.00	0.	0.	0.	0.
10	AIRPORT MAINTENANCE APRON AREA(SY)	79.46	476.	49.	96.	96.
11	AIRPORT MAINTENANCE BUILDING(SF)	0.00	0.	0.	0.	0.
	TOTAL IN THOUSANDS OF DOLLARS		3.6	0.8	0.8	0.8

PROJECT COST LESS FEDERAL GRANTS

		FED SHARE	1977	1982	1987	1992
1	GA TERMINAL BUILDING AREA(SF)	0.00	0.	0.	0.	0.
2	GA AIRCRAFT LOADING POSITIONS(NUMBER)	0.00	0.	0.	0.	0.
3	GA AC LOADING & BYPASS APRON AREA(SY)	79.46	0.	0.	0.	0.
4	ITINERANT AIRCRAFT PARKING AREA(SY)	79.46	0.	0.	0.	0.
5	GA BASED AIRCRAFT TIE-DOWN AREA(SY)	79.46	379.	107.	107.	107.
6	GA CONV HANGAR BLDG AND APRON AREA(SY)	79.46	0.	0.	0.	0.
7	GA +T+ HANGAR BLDG & APRON AREA(SY)	79.46	1420.	286.	286.	286.
8	GA PUBLIC VEHICULAR PARKING SPACE(NO.)	0.00	0.	0.	0.	0.
9	GA PUBLIC VEHICULAR PARKING AREA(SY)	0.00	3439.	748.	1497.	748.
10	AIRPORT MAINTENANCE APRON AREA(SY)	79.46	123.	12.	24.	24.
11	AIRPORT MAINTENANCE BUILDING(SF)	0.00	167.	17.	33.	33.
	TOTAL IN THOUSANDS OF DOLLARS		5.5	1.2	2.0	1.2

TOWNSEND (CANYON FERRY)

The Canyon Ferry Lake is situated in western Montana west of the Big Belt Mountains and 20 miles southeast of Helena.

The airstrip is located adjacent to the Lake, one mile off U. S. 12, and 13 miles north of the City of Townsend. The facility is for recreational use. Small private aircraft (D&E) have been forecasted for the period.

Facility Requirements

The present runway will need to be extended.

Name: TOWNSEND - C.F.

Site Number:. 12531.1

County:. BROADWATER

District:. 8

PEAK HOUR IFR AND VFR DEMAND FORECASTS

	1977	1982	1987	1992
TOWNSEND CAN. FER.MONTANA				
TOTAL PEAK HOUR VFR DEMAND	1.	1.	1.	2.
GA IFR PEAK HOUR DEMAND	0.	0.	0.	0.

OPERATIONAL DATA

DEMAND FORECAST INDICATORS

	1977	1982	1987	1992
1 TOTAL GA ANNUAL OPERATIONS	800.0	900.0	1000.0	1200.0
2 GA PEAK HOUR OPERATIONS	1.0	1.0	1.0	2.0
3 PERCENT GA ITINERANT OPERATIONS	100.0	100.0	50.0	50.0
4 BASED AIRCRAFT UNDER 12500 LBS	0.0	0.0	0.0	1.0
5 BASED AIRCRAFT OVER 12500 LBS	0.0	0.0	0.0	0.0

AIRCRAFT MIX AND CAPACITY FORECASTS

	1972	1977	1982	1987	1992
AIRCRAFT TYPE *A*	0	0	0	0	0
AIRCRAFT TYPE *B*	0	0	0	0	0
AIRCRAFT TYPE *C*	0	0	0	0	0
AIRCRAFT TYPE *D-E*	100	100	100	100	100
HOURLY CAPACITY VFR	77	88	99	99	99
HOURLY CAPACITY IFR	0	0	0	0	0
ANNUAL CAPACITY(000)	107	122	138	138	138

DEVELOPMENT COST SUMMARY

PLAN PERIOD	PARTICIPATION	LAND SIDE	AIR SIDE	TOTAL
BEFORE 1977	FEDERAL	$	$	$
	STATE/LOCAL		8,000	8,000
	TOTAL		8,000	8,000
1977	FEDERAL			
	STATE/LOCAL	1,000		1,000
	TOTAL	1,000		1,000
1982	FEDERAL			
	STATE/LOCAL			
	TOTAL			
1987	FEDERAL			
	STATE/LOCAL			
	TOTAL			
1992	FEDERAL			
	STATE/LOCAL	2,000		2,000
	TOTAL	2,000		2,000
TOTAL COSTS TO 1992	FEDERAL			
	STATE/LOCAL	3,000	8,000	11,000
	TOTAL	3,000	8,000	11,000

CANYON FERRY

MSASP AIRFIELD DEVELOPMENT COSTS IN THOUSANDS OF 1972 DOLLARS

TOWNSEND CANYON F

SEASIDE

	FED SHARE	TOTAL	FED GRANTS	STATE/LOCAL
BEFORE 1977				
1 EXTEND RUNWAY(16/34)				
A EARTHWORK	0.00	3.60	0.00	3.60
B LAND AQUISITION	0.00	1.86	0.00	1.86
C EASEMENTS	0.00	0.80	0.00	0.80
D SITE PREPARATION	0.00	1.68	0.00	1.68
TOTAL ($000)		7.95	0.01	7.95
TOTAL PROJECT COSTS		7.95	0.01	7.95

LANDSIDE

FEDERAL SHARE OF THE PROJECT COSTS

	FED SHARE	1977	1982	1987	1992
1 GA TERMINAL BUILDING AREA(SF)	0.00	0.	0.	0.	0.
2 GA AIRCRAFT LOADING POSITIONS(NUMBER)	0.00	0.	0.	0.	0.
3 GA AC LOADING & BYPASS APRON AREA(SY)	0.00	0.	0.	0.	0.
4 ITINERANT AIRCRAFT PARKING AREA(SY)	0.00	0.	0.	0.	0.
5 GA BASED AIRCRAFT TIE-DOWN AREA(SY)	0.00	0.	0.	0.	0.
6 GA CONV HANGAR BLDG AND APRON AREA(SY)	0.00	0.	0.	0.	0.
7 GA #T# HANGAR BLDG & APRON AREA(SY)	0.00	0.	0.	0.	0.
8 GA PUBLIC VEHICULAR PARKING SPACE(NO.)	0.00	0.	0.	0.	0.
9 GA PUBLIC VEHICULAR PARKING AREA(SY)	0.00	0.	0.	0.	0.
10 AIRPORT MAINTENANCE APRON AREA(SY)	0.00	0.	0.	0.	0.
11 AIRPORT MAINTENANCE BUILDING(SF)	0.00	0.	0.	0.	0.
TOTAL IN THOUSANDS OF DOLLARS		0.0	0.0	0.0	0.0

PROJECT COST LESS FEDERAL GRANTS

	FED SHARE	1977	1982	1987	1992
1 GA TERMINAL BUILDING AREA(SF)	0.00	0.	0.	0.	0.
2 GA AIRCRAFT LOADING POSITIONS(NUMBER)	0.00	0.	0.	0.	0.
3 GA AC LOADING & BYPASS APRON AREA(SY)	0.00	0.	0.	0.	0.
4 ITINERANT AIRCRAFT PARKING AREA(SY)	0.00	0.	0.	0.	0.
5 GA BASED AIRCRAFT TIE-DOWN AREA(SY)	0.00	3.	0.	0.	525.
6 GA CONV HANGAR BLDG AND APRON AREA(SY)	0.00	0.	0.	0.	408.
7 GA #T# HANGAR BLDG & APRON AREA(SY)	0.00	0.	0.	0.	408.
8 GA PUBLIC VEHICULAR PARKING SPACE(NO.)	0.00	0.	0.	0.	0.
9 GA PUBLIC VEHICULAR PARKING AREA(SY)	0.00	748.	0.	0.	748.
10 AIRPORT MAINTENANCE APRON AREA(SY)	0.00	36.	18.	18.	18.
11 AIRPORT MAINTENANCE BUILDING(SF)	0.00	10.	5.	5.	5.
TOTAL IN THOUSANDS OF DOLLARS		0.8	0.0	0.0	2.3

TROY

The town of Troy is in the Kootenai National Forest in northwest Montana. It is situated seven miles east of the Idaho-Montana border and 15 miles west of Libby on U. S. 2.

The airport is one-half mile north of town. This facility is owned by the U. S. Forest Service. Only 'D & E' aircraft activity is expected.

Facility Requirements

Slight land side additions will be necessary in the 1977 and 1992 intervals. Air side improvement should include obstruction removal before 1977.

Name: TROY

Site Number:. 12534

County:. LINCOLN

District:. 10

PEAK HOUR IFR AND VFR DEMAND FORECASTS

	1977	1982	1987	1992
TROY, MONTANA				
TOTAL PEAK HOUR VFR DEMAND	2.	3.	4.	5.
GA IFR PEAK HOUR DEMAND	0.	0.	0.	1.

OPERATIONAL DATA

DEMAND FORECAST INDICATORS

	1977	1982	1987	1992
1 TOTAL GA ANNUAL OPERATIONS	1300.0	1500.0	1700.0	1900.0
4 GA PEAK HOUR OPERATIONS	2.0	3.0	4.0	5.0
3 PERCENT GA ITINERANT OPERATIONS	80.0	75.0	72.0	70.0
4 BASED AIRCRAFT UNDER 12500 LBS	2.0	2.0	3.0	4.0
5 BASED AIRCRAFT OVER 12500 LBS	0.0	0.0	0.0	0.0

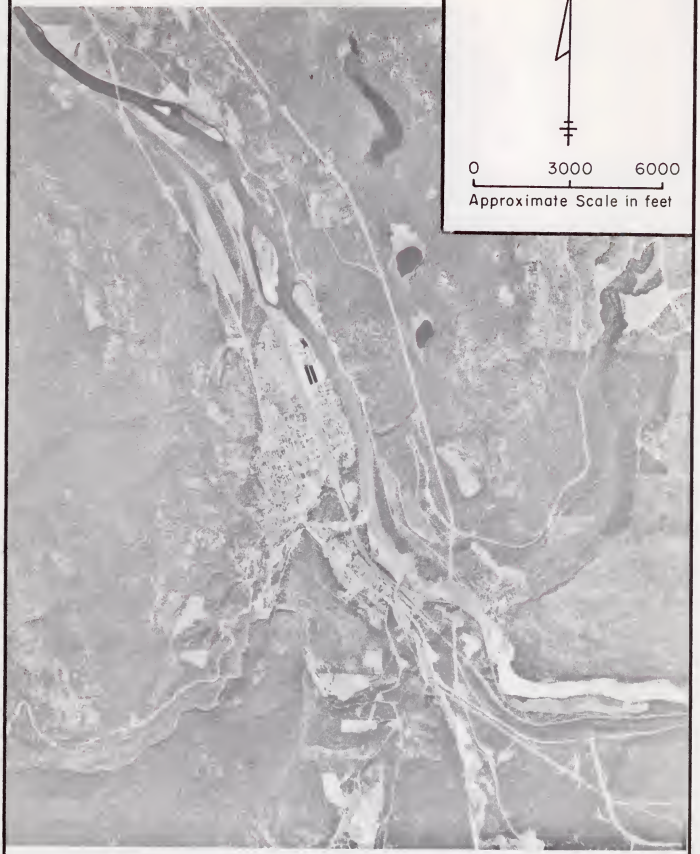
AIRCRAFT MIX AND CAPACITY FORECASTS

	1972	1977	1982	1987	1992
AIRCRAFT TYPE *A*	0	0	0	0	0
AIRCRAFT TYPE *B*	0	0	0	0	0
AIRCRAFT TYPE *C*	0	0	0	0	0
AIRCRAFT TYPE *D+E*	100	100	100	100	100
HOURLY CAPACITY VFR	77	88	99	99	99
HOURLY CAPACITY IFR	0	0	0	0	0
ANNUAL CAPACITY(000)	107	122	138	138	138

DEVELOPMENT COST SUMMARY

PLAN PERIOD	PARTICIPATION	LAND SIDE	AIR SIDE	TOTAL
BEFORE 1977	FEDERAL	$	$ 2,000	$ 2,000
	STATE/LOCAL			
	TOTAL		2,000	2,000
1977	FEDERAL	5,000		5,000
	STATE/LOCAL			
	TOTAL	5,000		5,000
1982	FEDERAL	1,000		1,000
	STATE/LOCAL			
	TOTAL	1,000		1,000
1987	FEDERAL	2,000		2,000
	STATE/LOCAL			
	TOTAL	2,000		2,000
1992	FEDERAL	5,000		5,000
	STATE/LOCAL			
	TOTAL	5,000		5,000
TOTAL COSTS TO 1992	FEDERAL	13,000	2,000	15,000
	STATE/LOCAL			
	TOTAL	13,000	2,000	15,000

TROY



MSASP AIRFIELD DEVELOPMENT COSTS IN THOUSANDS OF 1972 DOLLARS

TROY

AIRSIDE

	FED SHARE	TOTAL	FED GRANTS	STATE/LOCAL
BEFORE 1977				
1 OBSTRUCTION REMOVAL	100.00	2.00	2.00	0.00
TOTAL ($000)		2.00	2.00	0.00
TOTAL PROJECT COSTS		2.00	2.00	0.00

LANDSIDE

FEDERAL SHARE OF THE PROJECT COSTS

	FED SHARE	1977	1982	1987	1992
1 GA TERMINAL BUILDING AREA(SF)	100.00	0.	0.	0.	0.
2 GA AIRCRAFT LOADING POSITIONS(NUMBER)	100.00	0.	0.	0.	0.
3 GA AC LOADING & BYPASS APRON AREA(SY)	100.00	1020.	0.	0.	1020.
4 ITINERANT AIRCRAFT PARKING AREA(SY)	100.00	750.	0.	0.	1530.
5 GA BASED AIRCRAFT TIE-DOWN AREA(SY)	100.00	273.	0.	525.	525.
6 GA CONV HANGAR BLDG AND APRON AREA(SY)	100.00	0.	0.	0.	0.
7 GA #T# HANGAR BLDG & APRON AREA(SY)	100.00	1215.	0.	608.	608.
8 GA PUBLIC VEHICULAR PARKING SPACE(NO.)	100.00	0.	0.	0.	0.
9 GA PUBLIC VEHICULAR PARKING AREA(SY)	100.00	1497.	748.	748.	748.
10 AIRPORT MAINTENANCE APRON AREA(SY)	100.00	234.	36.	36.	36.
11 AIRPORT MAINTENANCE BUILDING(SF)	100.00	65.	10.	10.	10.
TOTAL IN THOUSANDS OF DOLLARS		5.1	0.8	1.9	4.5

PROJECT COST LESS FEDERAL GRANTS

	FED SHARE	1977	1982	1987	1992
1 GA TERMINAL BUILDING AREA(SF)	100.00	0.	0.	0.	0.
2 GA AIRCRAFT LOADING POSITIONS(NUMBER)	100.00	0.	0.	0.	0.
3 GA AC LOADING & BYPASS APRON AREA(SY)	100.00	0.	0.	0.	0.
4 ITINERANT AIRCRAFT PARKING AREA(SY)	100.00	0.	0.	0.	0.
5 GA BASED AIRCRAFT TIE-DOWN AREA(SY)	100.00	0.	0.	0.	0.
6 GA CONV HANGAR BLDG AND APRON AREA(SY)	100.00	0.	0.	0.	0.
7 GA #T# HANGAR BLDG & APRON AREA(SY)	100.00	0.	0.	0.	0.
8 GA PUBLIC VEHICULAR PARKING SPACE(NO.)	100.00	0.	0.	0.	0.
9 GA PUBLIC VEHICULAR PARKING AREA(SY)	100.00	0.	0.	0.	0.
10 AIRPORT MAINTENANCE APRON AREA(SY)	100.00	0.	0.	0.	0.
11 AIRPORT MAINTENANCE BUILDING(SF)	100.00	0.	0.	0.	0.
TOTAL IN THOUSANDS OF DOLLARS		0.0	0.0	0.0	0.0

TURNER

The town is located in northern Montana, 12 miles from the U. S. - Canada border and 35 miles north of the Fort Belknap Indian Reservation. Harlem is 31 miles south on county route 241 an improved-gravelled road, which provides the only access. The airport is immediately north of town. Restrictive zoning should be considered to insure community developments compatible with the airport.

Facility Requirements

Small land side additions are necessary in the 1977 interval. The runway should be extended, paved and lighted before 1977.

Name: TURNER

Site Number:. 12535

County:. BLAINE

District:. 4

PEAK HOUR IFR AND VFR DEMAND FORECASTS

	1977	1982	1987	1992
TURNER MONTANA				
TOTAL PEAK HOUR VFR DEMAND	5.	6.	7.	7.
GA IFR PEAK HOUR DEMAND	0.	0.	1.	1.

OPERATIONAL DATA

DEMAND FORECAST INDICATORS

	1977	1982	1987	1992
1 TOTAL GA ANNUAL OPERATIONS	2330.0	2670.0	3000.0	3000.0
2 GA PEAK HOUR OPERATIONS	5.0	6.0	7.0	7.0
3 PERCENT GA ITINERANT OPERATIONS	30.0	30.0	30.0	30.0
4 BASED AIRCRAFT UNDER 12500 LBS	4.0	4.0	5.0	5.0
5 BASED AIRCRAFT OVER 12500 LBS	0.0	0.0	0.0	0.0

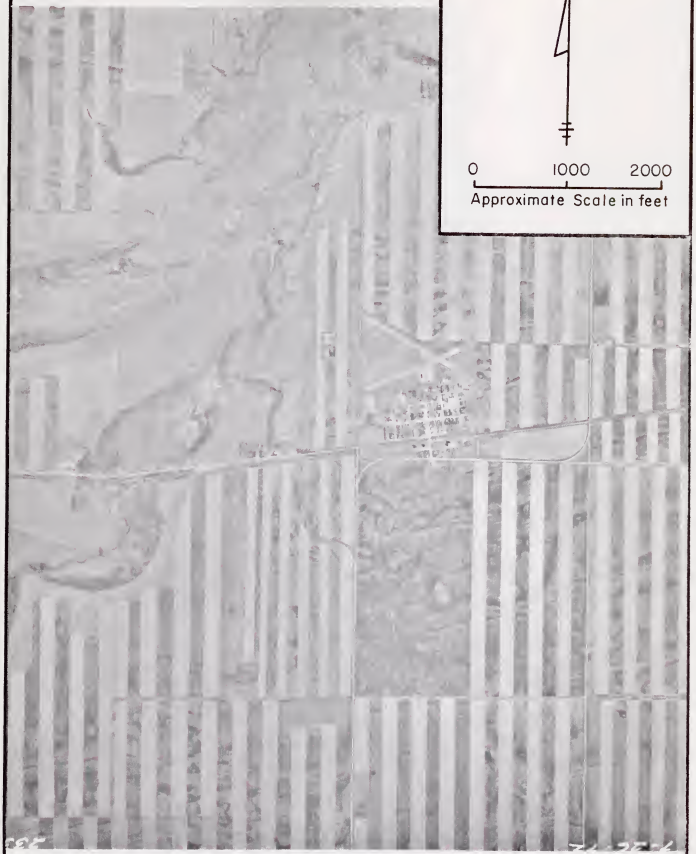
AIRCRAFT MIX AND CAPACITY FORECASTS

	1972	1977	1982	1987	1992
AIRCRAFT TYPE *A*	0	0	0	0	0
AIRCRAFT TYPE *B*	0	0	0	0	0
AIRCRAFT TYPE *C*	0	0	0	0	0
AIRCRAFT TYPE *D+E*	100	100	100	100	100
HOURLY CAPACITY VFR	77	88	99	99	99
HOURLY CAPACITY IFR	0	0	0	0	0
ANNUAL CAPACITY(000)	107	122	138	138	138

DEVELOPMENT COST SUMMARY

PLAN PERIOD	PARTICIPATION	LAND SIDE	AIR SIDE	TOTAL
BEFORE 1977	FEDERAL	$	$	$
	STATE/LOCAL		305,000	305,000
	TOTAL		305,000	305,000
1977	FEDERAL			
	STATE/LOCAL	7,000		7,000
	TOTAL	7,000		7,000
1982	FEDERAL			
	STATE/LOCAL	1,000		1,000
	TOTAL	1,000		1,000
1987	FEDERAL	1,000		1,000
	STATE/LOCAL	1,000		1,000
	TOTAL	2,000		2,000
1992	FEDERAL			
	STATE/LOCAL			
	TOTAL			
TOTAL COSTS TO 1992	FEDERAL	1,000		1,000
	STATE/LOCAL	9,000	305,000	314,000
	TOTAL	10,000	305,000	315,000

TURNER



MSASP AIRFIELD DEVELOPMENT COSTS IN THOUSANDS OF 1972 DOLLARS

TURNER

AIRSIDE

	FED SHARE	TOTAL	FED GRANTS	STATE/LOCAL
BEFORE 1977				
1 EXTEND RUNWAY (10-20)				
A EARTHWORK	0.00	5.10	0.00	5.10
B LAND ACQUISITION	0.00	2.48	0.00	2.48
C SITE PREPARATION	0.00	4.82	0.00	4.82
D OBSTRUCTIONS	0.00	0.10	0.00	0.10
E DRAINAGE	0.00	1.60	0.00	1.60
2 PAVE RUNWAY(10-20)	0.00	260.00	0.00	260.00
3 MIRL RUNWAY(10-20)	0.00	31.20	0.00	31.20
TOTAL ($000)		305.43	0.03	305.43
TOTAL PROJECT COSTS		305.43	0.03	305.43

FEDERAL SHARE OF THE PROJECT COSTS

	FED SHARE	1977	1982	1987	1992
1 GA TERMINAL BUILDING AREA(SF)	0.00	0.	0.	0.	0.
2 GA AIRCRAFT LOADING POSITIONS(NUMBER)	0.00	0.	0.	0.	0.
3 GA AC LOADING & BYPASS APRON AREA(SY)	79.46	0.	0.	0.	0.
4 ITINERANT AIRCRAFT PARKING AREA(SY)	79.46	0.	0.	0.	0.
5 GA BASED AIRCRAFT TIE-DOWN AREA(SY)	79.46	0.	0.	0.	0.
6 GA CONV HANGAR BLDG AND APRON AREA(SY)	79.46	0.	0.	417.	0.
7 GA *T* HANGAR BLDG & APRON AREA(SY)	79.46	0.	0.	0.	0.
8 GA PUBLIC VEHICULAR PARKING SPACE(NO.)	0.00	0.	0.	0.	0.
9 GA PUBLIC VEHICULAR PARKING AREA(SY)	0.00	0.	0.	0.	0.
10 AIRPORT MAINTENANCE APRON AREA(SY)	79.46	0.	0.	0.	0.
11 AIRPORT MAINTENANCE BUILDING(SF)	0.00	0.	0.	47.	0.
TOTAL IN THOUSANDS OF DOLLARS		0.0	0.0	0.5	0.0

LANDSIDE

PROJECT COST LESS FEDERAL GRANTS

	FED SHARE	1977	1982	1987	1992
1 GA TERMINAL BUILDING AREA(SF)	0.00	0.	0.	0.	0.
2 GA AIRCRAFT LOADING POSITIONS(NUMBER)	0.00	0.	0.	0.	0.
3 GA AC LOADING & BYPASS APRON AREA(SY)	79.46	1020.	0.	0.	0.
4 ITINERANT AIRCRAFT PARKING AREA(SY)	79.46	0.	0.	0.	0.
5 GA BASED AIRCRAFT TIE-DOWN AREA(SY)	79.46	2103.	0.	107.	0.
6 GA CONV HANGAR BLDG AND APRON AREA(SY)	79.46	0.	0.	0.	0.
7 GA *T* HANGAR BLDG & APRON AREA(SY)	79.46	0.	0.	0.	0.
8 GA PUBLIC VEHICULAR PARKING SPACE(NO.)	0.00	0.	0.	0.	0.
9 GA PUBLIC VEHICULAR PARKING AREA(SY)	0.00	3742.	748.	748.	0.
10 AIRPORT MAINTENANCE APRON AREA(SY)	79.46	419.	61.	12.	0.
11 AIRPORT MAINTENANCE BUILDING(SF)	0.00	117.	17.	17.	0.
TOTAL IN THOUSANDS OF DOLLARS		7.4	0.8	0.9	0.0

TWIN BRIDGES

The town of Twin Bridges is situated in southwest Montana on the Beaverhead River. The town is at the intersection of State Route 41 and 287. Dillon is 28 miles south on State Route 41.

The airport is one-half mile southeast of town off State Route 287. In 1982 'C' type aircraft activity will begin.

Restrictive zoning should be considered to insure community developments compatible with the airport.

Facility Requirements

The 1977 increment will require a small amount of land side addition. Air side expansion should include extending and lighting runway (16-34) the uneven terrain will require considerable earthwork. The runway should be paved in 1977.

Name: TWIN BRIDGES

Site Number:. 12537

County:. MADISON

District:. 12

PEAK HOUR IFR AND VFR DEMAND FORECASTS

	1977	1982	1987	1992
TWIN BRIDGES, MONTANA				
TOTAL PEAK HOUR VFR DEMAND	9.	10.	10.	11.
GA IFR PEAK HOUR DEMAND	0.	1.	1.	1.

OPERATIONAL DATA

DEMAND FORECAST INDICATORS

	1977	1982	1987	1992
1 TOTAL GA ANNUAL OPERATIONS	4000.0	4330.0	4670.0	5000.0
2 GA PEAK HOUR OPERATIONS	9.0	10.0	10.0	11.0
3 PERCENT GA ITINERANT OPERATIONS	30.0	30.0	30.0	30.0
4 BASED AIRCRAFT UNDER 12500 LBS	9.0	9.0	9.0	9.0
5 BASED AIRCRAFT OVER 12500 LBS	0.0	0.0	0.0	0.0

AIRCRAFT MIX AND CAPACITY FORECASTS

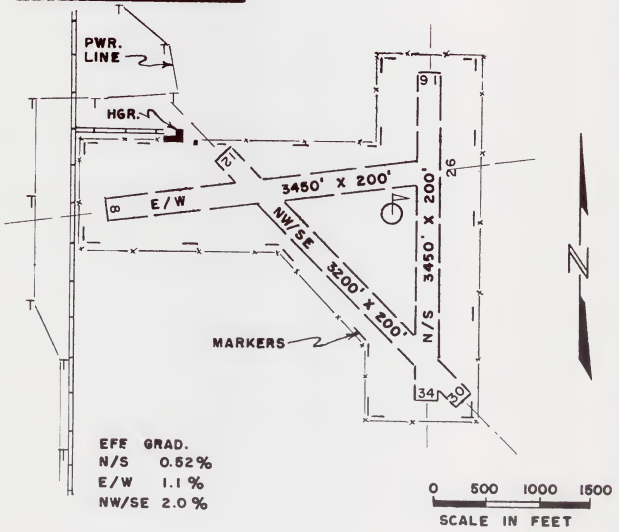
	1972	1977	1982	1987	1992
AIRCRAFT TYPE *A*	0	0	0	0	0
AIRCRAFT TYPE *B*	0	0	0	0	0
AIRCRAFT TYPE *C*	0	0	1	2	4
AIRCRAFT TYPE *D+E*	100	100	99	98	96
HOURLY CAPACITY VFR	77	88	99	99	99
HOURLY CAPACITY IFR	0	0	0	0	4
ANNUAL CAPACITY(000)	107	122	138	138	138

DEVELOPMENT COST SUMMARY

PLAN PERIOD	PARTICIPATION	LAND SIDE	AIR SIDE	TOTAL
BEFORE 1977	FEDERAL	$	$ 88,000	$ 88,000
	STATE/LOCAL		23,000	23,000
	TOTAL		111,000	111,000
1977	FEDERAL	5,000	213,000	218,000
	STATE/LOCAL	8,000	55,000	63,000
	TOTAL	13,000	268,000	281,000
1982	FEDERAL			
	STATE/LOCAL	1,000		1,000
	TOTAL	1,000		1,000
1987	FEDERAL			
	STATE/LOCAL			
	TOTAL			
1992	FEDERAL	1,000		1,000
	STATE/LOCAL	1,000		1,000
	TOTAL	2,000		2,000
TOTAL COSTS TO 1992	FEDERAL	6,000	301,000	307,000
	STATE/LOCAL	10,000	78,000	88,000
	TOTAL	16,000	379,000	395,000

TWIN BRIDGES

AIRPORT LAYOUT



MSASP AIRFIELD DEVELOPMENT COSTS IN THOUSANDS OF 1972 DOLLARS

TWIN BRIDGES

	FED SHARE	TOTAL	FED GRANTS	STATE/LOCAL
BEFORE 1977				
1 EXTEND RUNWAY (16-34)				
A EARTHWORK	79.46	67.50	53.63	13.86
B LAND ACQUISITION	79.46	2.26	1.79	0.46
C EASEMENTS	79.46	0.56	0.44	0.11
D SITE PREPARATION	79.46	6.60	5.24	1.35
E DRAINAGE	79.46	3.60	2.86	0.73
2 LIGHTING(MIRL)	79.46	30.80	24.47	6.32
TOTAL ($000)		111.34	88.48	22.89
1977				
3 NDB	79.46	8.00	6.35	1.64
4 PAVE RUNWAY(16/34)	79.46	260.00	206.59	53.40
TOTAL ($000)		268.01	212.96	55.05
TOTAL PROJECT COSTS		379.35	301.44	77.95

FEDERAL SHARE OF THE PROJECT COSTS

	FED SHARE	1977	1982	1987	1992
1 GA TERMINAL BUILDING AREA(SF)	0.00	0.	0.	0.	0.
2 GA AIRCRAFT LOADING POSITIONS(NUMBER)	0.00	0.	0.	0.	0.
3 GA AC LOADING & BYPASS APRON AREA(SY)	79.46	810.	0.	0.	810.
4 ITINERANT AIRCRAFT PARKING AREA(SY)	79.46	0.	0.	0.	0.
5 GA BASED AIRCRAFT TIE-DOWN AREA(SY)	79.46	1850.	0.	0.	0.
6 GA CONV HANGAR BLDG AND APRON AREA(SY)	79.46	1459.	0.	0.	0.
7 GA *T* HANGAR BLDG & APRON AREA(SY)	79.46	0.	0.	0.	0.
8 GA PUBLIC VEHICULAR PARKING SPACE(NO.)	0.00	0.	0.	0.	0.
9 GA PUBLIC VEHICULAR PARKING AREA(SY)	0.00	0.	0.	0.	0.
10 AIRPORT MAINTENANCE APRON AREA(SY)	79.46	572.	47.	49.	47.
11 AIRPORT MAINTENANCE BUILDING(SF)	0.00	0.	0.	0.	0.
TOTAL IN THOUSANDS OF DOLLARS		4.7	0.0	0.1	0.9

PROJECT COST LESS FEDERAL GRANTS

	FED SHARE	1977	1982	1987	1992
1 GA TERMINAL BUILDING AREA(SF)	0.00	0.	0.	0.	0.
2 GA AIRCRAFT LOADING POSITIONS(NUMBER)	0.00	0.	0.	0.	0.
3 GA AC LOADING & BYPASS APRON AREA(SY)	79.46	209.	0.	0.	209.
4 ITINERANT AIRCRAFT PARKING AREA(SY)	79.46	0.	0.	0.	0.
5 GA BASED AIRCRAFT TIE-DOWN AREA(SY)	79.46	478.	0.	0.	0.
6 GA CONV HANGAR BLDG AND APRON AREA(SY)	79.46	2213.	0.	0.	0.
7 GA *T* HANGAR BLDG & APRON AREA(SY)	79.46	0.	0.	0.	0.
8 GA PUBLIC VEHICULAR PARKING SPACE(NO.)	0.00	0.	0.	0.	0.
9 GA PUBLIC VEHICULAR PARKING AREA(SY)	0.00	4486.	748.	0.	748.
10 AIRPORT MAINTENANCE APRON AREA(SY)	79.46	147.	12.	12.	12.
11 AIRPORT MAINTENANCE BUILDING(SF)	0.00	200.	17.	17.	16.
TOTAL IN THOUSANDS OF DOLLARS		7.7	0.8	0.0	1.0

VALIER

The town of Valier is in northwest Montana on Lake Frances, five miles southeast of the Blackfeet Indian Reservation. County route 216 serves as access to the east and west. Interstate 91 lies 15 miles east, and U. S. 89 is 13 miles to the west.

The airport is bounded on the north by the town and on the south by Lake Frances. A small amount of 'C' type aircraft activity is expected in 1987. Restrictive zoning should be considered to insure community developments compatible with the airport.

Facility Requirements

A small amount of work is necessary for land side items throughout the forecast period, except in 1992 when terminal building area will be a moderately high cost item. The air side addition will consist of a runway expansion paving and a MIRL system.

NAVAIDS: Due to its proximity and the lack of intervening obstructions, the VOR at Cut Bank may be used as the approach aid for Valier Airport.

Name: VALIER

Site Number:. 12540

County:. PONDERA

Oistrict:. 5

PEAK HOUR IFR AND VFR DEMAND FORECASTS

	1977	1982	1987	1992
VALIER MONTANA				
TOTAL PEAK HOUR VFR DEMAND	8.	10.	11.	12.
CA IFR PEAK HOUR DEMAND	0.	1.	1.	1.

OPERATIONAL DATA

DEMAND FORECAST INDICATORS

	1977	1982	1987	1992
1 TOTAL GA ANNUAL OPERATIONS	3670.0	4330.0	5000.0	5670.0
2 GA PEAK HOUR OPERATIONS	8.0	10.0	11.0	12.0
3 PERCENT GA ITINERANT OPERATIONS	30.0	30.0	30.0	30.0
4 BASED AIRCRAFT UNDER 12500 LBS	6.0	7.0	8.0	9.0
5 BASED AIRCRAFT OVER 12500 LBS	0.0	0.0	0.0	0.0

AIRCRAFT MIX AND CAPACITY FORECASTS

	1972	1977	1982	1987	1992
AIRCRAFT TYPE *A*	0	0	0	0	0
AIRCRAFT TYPE *B*	0	0	0	0	0
AIRCRAFT TYPE *C*	0	0	0	1	1
AIRCRAFT TYPE *D+E*	100	100	100	99	99
HOURLY CAPACITY VFR	85	92	99	99	99
HOURLY CAPACITY IFR	0	0	0	0	0
ANNUAL CAPACITY(000)	118	128	138	138	138

DEVELOPMENT COST SUMMARY

PLAN PERIOD	PARTICIPATION	LAND SIOE	AIR SIOE	TOTAL
BEFORE 1977	FEDERAL	$	$ 236,000	$ 236,000
	STATE/LOCAL		61,000	61,000
	TOTAL		297,000	297,000
1977	FEDERAL	3,000		3,000
	STATE/LOCAL	6,000		6,000
	TOTAL	9,000		9,000
1982	FEDERAL	1,000		1,000
	STATE/LOCAL	2,000		2,000
	TOTAL	3,000		3,000
1987	FEDERAL	2,000		2,000
	STATE/LOCAL	1,000		1,000
	TOTAL	3,000		3,000
1992	FEDERAL	1,000		1,000
	STATE/LOCAL	12,000		12,000
	TOTAL	13,000		13,000
TOTAL COSTS TO 1992	FEDERAL	7,000	236,000	243,000
	STATE/LOCAL	21,000	61,000	82,000
	TOTAL	28,000	297,000	325,000

VALIER

MSASP AIRFIELD DEVELOPMENT COSTS IN THOUSANDS OF 1972 DOLLARS

VALIER

	FED SHARE	TOTAL	FED GRANTS	STATE/LOCAL
BEFORE 1977				
1 EXPAND RUNWAY(7-25)				
A EARTH WORK	79.46	4.20	3.33	0.86
B SITE PREPARTION	79.46	1.92	1.52	0.39
C DRAINAGE	79.46	4.20	3.33	0.86
2 LIGHTING(MIRL)	79.46	26.60	21.13	5.46
3 PAVE RUNWAY(7/25)	79.46	260.00	206.59	53.40
TOTAL ($000)		296.94	235.95	61.01
TOTAL PROJECT COSTS		296.94	235.95	61.01

LANDSIDE

FEDERAL SHARE OF THE PROJECT COSTS

	FED SHARE	1977	1982	1987	1992
1 GA TERMINAL BUILDING AREA(SF)	0.00	0.	0.	0.	0.
2 GA AIRCRAFT LOADING POSITIONS(NUMBER)	0.00	0.	0.	0.	0.
3 GA AC LOADING & BYPASS APRON AREA(SY)	79.46	810.	0.	810.	0.
4 ITINERANT AIRCRAFT PARKING AREA(SY)	79.46	0.	0.	0.	0.
5 GA BASED AIRCRAFT TIE-DOWN AREA(SY)	79.46	598.	417.	417.	417.
6 GA CONV HANGAR BLDG AND APRON AREA(SY)	79.46	972.	162.	162.	162.
7 GA *T* HANGAR BLDG & APRON AREA(SY)	79.46	0.	0.	0.	0.
8 GA PUBLIC VEHICULAR PARKING SPACE(NO.)	0.00	0.	0.	0.	0.
9 GA PUBLIC VEHICULAR PARKING AREA(SY)	0.00	0.	0.	0.	0.
10 AIRPORT MAINTENANCE APRON AREA(SY)	79.46	525.	94.	96.	96.
11 AIRPORT MAINTENANCE BUILDING(SF)	0.00	0.	0.	0.	0.
TOTAL IN THOUSANDS OF DOLLARS		2.9	0.7	1.5	0.7

PROJECT COST LESS FEDERAL GRANTS

	FED SHARE	1977	1982	1987	1992
1 GA TERMINAL BUILDING AREA(SF)	0.00	0.	0.	0.	10720.
2 GA AIRCRAFT LOADING POSITIONS(NUMBER)	0.00	0.	0.	0.	0.
3 GA AC LOADING & BYPASS APRON AREA(SY)	79.46	209.	0.	209.	0.
4 ITINERANT AIRCRAFT PARKING AREA(SY)	79.46	0.	0.	0.	0.
5 GA BASED AIRCRAFT TIE-DOWN AREA(SY)	79.46	154.	107.	107.	107.
6 GA CONV HANGAR BLDG AND APRON AREA(SY)	79.46	1475.	246.	246.	246.
7 GA *T* HANGAR BLDG & APRON AREA(SY)	79.46	0.	0.	0.	0.
8 GA PUBLIC VEHICULAR PARKING SPACE(NO.)	0.00	0.	0.	0.	0.
9 GA PUBLIC VEHICULAR PARKING AREA(SY)	0.00	3738.	1497.	748.	748.
10 AIRPORT MAINTENANCE APRON AREA(SY)	79.46	135.	24.	24.	24.
11 AIRPORT MAINTENANCE BUILDING(SF)	0.00	184.	33.	33.	34.
TOTAL IN THOUSANDS OF DOLLARS		5.9	1.9	1.4	11.9

WHITE SULPHUR SPRINGS

The town is in a flat valley area between the Big Belt and Castle Mountains of western Montana. White Sulphur Springs is a sawmill town with the Lewis and Clark National Forest to the east and north and the Helena National Forest to the west. U. S. 12 and 89 provide access to the north, south and east.

The airport is located three miles south of town off U. S. 12 & 89. Only D & E type aircraft are forecasted.

Facility Requirements

A moderate amount of expansion is needed in the 1977 increment period. Air side addition will consist of a runway extension including a MIRL system and paving of the runway before 1977.

NAVAIDS: An NDB should be considered for installation by 1977.

Name: WHITE SULPHUR SPRINGS

Site Number:. 12558.1

County:. MEAGHER

District:. 9

PEAK HOUR IFR AND VFR DEMAND FORECASTS

	1977	1982	1987	1992
WHITE SULPHUR SPRINGS,MONTANA				
TOTAL PEAK HOUR VFR DEMAND	10.	12.	13.	15.
GA IFR PEAK HOUR DEMAND	1.	1.	1.	2.

OPERATIONAL DATA

DEMAND FORECAST INDICATORS

	1977	1982	1987	1992
1 TOTAL GA ANNUAL OPERATIONS	4600.0	5330.0	5760.0	6670.0
2 GA PEAK HOUR OPERATIONS	10.0	12.0	13.0	15.0
3 PERCENT GA ITINERANT OPERATIONS	30.0	30.0	30.0	30.0
4 BASED AIRCRAFT UNDER 12500 LBS	7.0	8.0	9.0	10.0
5 BASED AIRCRAFT OVER 12500 LBS	0.0	0.0	0.0	0.

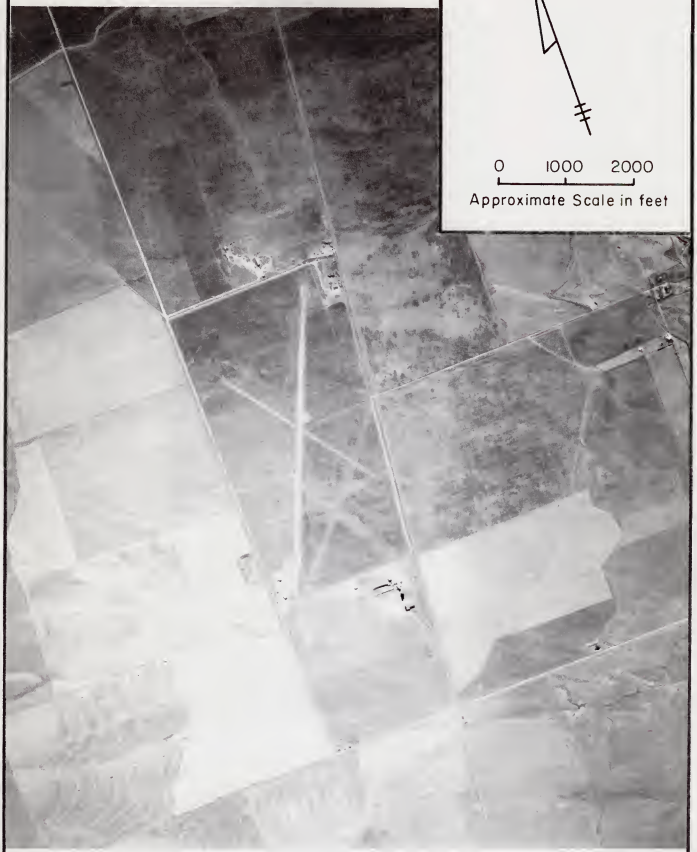
AIRCRAFT MIX AND CAPACITY FORECASTS

	1972	1977	1982	1987	1992
AIRCRAFT TYPE *A*	0	0	0	0	0
AIRCRAFT TYPE *B*	0	0	0	0	0
AIRCRAFT TYPE *C*	0	0	0	0	0
AIRCRAFT TYPE *D+E*	100	100	100	100	100
HOURLY CAPACITY VFR	85	92	99	99	99
HOURLY CAPACITY IFR	0	0	0	0	0
ANNUAL CAPACITY(000)	118	128	138	138	138

DEVELOPMENT COST SUMMARY

PLAN PERIOD	PARTICIPATION	LAND SIOE	AIR SIOE	TOTAL
BEFORE 1977	FEDERAL	$	$ 36,000	$ 36,000
	STATE/LOCAL		9,000	9,000
	TOTAL		45,000	45,000
1977	FEDERAL	6,000		6,000
	STATE/LOCAL	11,000		11,000
	TOTAL	17,000		17,000
1982	FEDERAL	1,000		1,000
	STATE/LOCAL	13,000		13,000
	TOTAL	14,000		14,000
1987	FEDERAL	1,000		1,000
	STATE/LOCAL	2,000		2,000
	TOTAL	3,000		3,000
1992	FEDERAL	1,000	79,000	80,000
	STATE/LOCAL	4,000	21,000	25,000
	TOTAL	5,000	100,000	105,000
TOTAL COSTS TO 1992	FEDERAL	9,000	115,000	124,000
	STATE/LOCAL	30,000	30,000	60,000
	TOTAL	39,000	145,000	184,000

WHITE SULPHUR SPRINGS



LANDSIDE

MSASP AIRFIELD DEVELOPMENT COSTS IN THOUSANDS OF 1972 DOLLARS

WHITE SULPHUR SPRING

	FED $HARE	TOTAL	FED GRANTS	STATE/LOCAL
BEFORE 1977				
1 EXTEND RUNWAY(2-20)				
A EARTHWORK	79.46	0.97	0.77	0.20
B EASEMENTS	79.46	0.01	0.00	0.00
C SITE PREPARATION	79.46	0.96	0.76	0.19
2 LIGHTING (MIRL)	79.46	35.50	28.20	7.29
3 NDB	79.46	8.00	6.35	1.64
TOTAL ($000)		45.47	36.13	9.35
1992				
4 PAVING	79.46	100.00	79.45	20.54
TOTAL ($000)		100.00	79.46	20.54
TOTAL PROJECT COSTS		145.47	115.60	29.90

LANDSIDE

FEDERAL $HARE OF THE PROJECT COSTS

	FED $HARE	1977	1982	1987	1992
1 GA TERMINAL BUILDING AREA(SF)	0.00	0.	0.	0.	0.
2 GA AIRCRAFT LOADING POSITIONS(NUMBER)	0.00	0.	0.	0.	0.
3 GA AC LOADING & BYPASS APRON AREA(SY)	79.46	0.	0.	0.	0.
4 ITINERANT AIRCRAFT PARKING AREA(SY)	79.46	0.	0.	0.	0.
5 GA BASED AIRCRAFT TIE-DOWN AREA(SY)	79.46	2922.	417.	417.	417.
6 GA CONV HANGAR BLDG AND APRON AREA(SY)	79.46	0.	0.	0.	0.
7 GA *T* HANGAR BLDG & APRON AREA(SY)	79.46	2253.	322.	322.	322.
8 GA PUBLIC VEHICULAR PARKING SPACE(NO.)	0.00	0.	0.	0.	0.
9 GA PUBLIC VEHICULAR PARKING AREA(SY)	0.00	0.	0.	0.	0.
10 AIRPORT MAINTENANCE APRON AREA(SY)	79.46	658.	104.	61.	130.
11 AIRPORT MAINTENANCE BUILDING(SF)	0.00	0.	0.	0.	0.
TOTAL IN THOUSANDS OF DOLLARS		5.8	0.8	0.8	0.9

PROJECT COST LESS FEDERAL GRANTS

	FED $HARE	1977	1982	1987	1992
1 GA TERMINAL BUILDING AREA(SF)	0.00	0.	10720.	810.	1620.
2 GA AIRCRAFT LOADING POSITIONS(NUMBER)	0.00	0.	0.	0.	0.
3 GA AC LOADING & BYPASS APRON AREA(SY)	79.46	0.	0.	0.	0.
4 ITINERANT AIRCRAFT PARKING AREA(SY)	79.46	0.	0.	0.	0.
5 GA BASED AIRCRAFT TIE-DOWN AREA(SY)	79.46	755.	107.	107.	107.
6 GA CONV HANGAR BLDG AND APRON AREA(SY)	79.46	0.	0.	0.	0.
7 GA *T* HANGAR BLDG & APRON AREA(SY)	79.46	2001.	286.	286.	286.
8 GA PUBLIC VEHICULAR PARKING SPACE(NO.)	0.00	0.	0.	0.	0.
9 GA PUBLIC VEHICULAR PARKING AREA(SY)	0.00	7484.	1497.	748.	1497.
10 AIRPORT MAINTENANCE APRON AREA(SY)	79.46	170.	27.	16.	33.
11 AIRPORT MAINTENANCE BUILDING(SF)	0.00	230.	37.	22.	46.
TOTAL IN THOUSANDS OF DOLLARS		10.6	12.7	2.0	3.6

WHITEFISH

Whitefish is situated in northwest Montana about 15 miles west of Glacier National Park. The Flathead National Forest is north, east and west of town. Kalispell is 14 miles south on U.S. 93. Amtrak provides daily passenger service to Belton and Libby.

The airport is one mile east of town. Only small private aircraft (D & E) are expected. Restrictive zoning should be considered to insure community developments compatible with the airport.

Facility Requirements

The 1977 benchmark period will require some land side expansion. The runway will need to be extended and stabilized before 1977.

Name: WHITEFISH

Site Number: 12552.1

County: FLATHEAD

District: 10

PEAK HOUR IFR AND VFR DEMAND FORECASTS

	1977	1982	1987	1992
WHITEFISH, MONTANA				
TOTAL PEAK HOUR VFR DEMAND	5.	6.	7.	9.
GA IFR PEAK HOUR DEMAND	0.	0.	1.	1.

OPERATIONAL DATA

DEMAND FORECAST INDICATORS

	1977	1982	1987	1992
1 TOTAL GA ANNUAL OPERATIONS	2100.0	2400.0	2700.0	3100.0
2 GA PEAK HOUR OPERATIONS	5.0	6.0	7.0	9.0
3 PERCENT GA ITINERANT OPERATIONS	35.0	35.0	30.0	30.0
4 BASED AIRCRAFT UNDER 12500 LBS	2.0	3.0	4.0	5.0
5 BASED AIRCRAFT OVER 12500 LBS	0.0	0.0	0.0	0.0

AIRCRAFT MIX AND CAPACITY FORECASTS

	1972	1977	1982	1987	1992
AIRCRAFT TYPE *A*	0	0	0	0	0
AIRCRAFT TYPE *B*	0	C	0	0	0
AIRCRAFT TYPE *C*	0	0	0	0	0
AIRCRAFT TYPE *D+E*	100	100	100	100	100
HOURLY CAPACITY VFR	85	92	99	99	99
HOURLY CAPACITY IFR	0	0	0	0	0
ANNUAL CAPACITY(000)	118	128	138	138	138

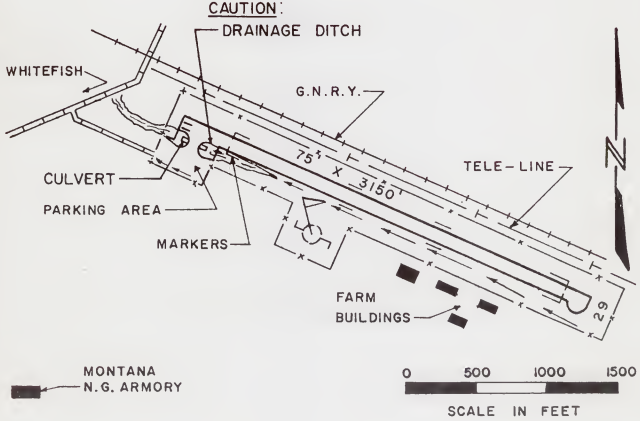
DEVELOPMENT COST SUMMARY

PLAN PERIOD	PARTICIPATION	LAND SIDE	AIR SIDE	TOTAL
BEFORE 1977	FEDERAL	$	$	$
	STATE/LOCAL		62,000	62,000
	TOTAL		62,000	62,000
1977	FEDERAL			
	STATE/LOCAL	8,000		8,000
	TOTAL	8,000		8,000
1982	FEDERAL			
	STATE/LOCAL	2,000		2,000
	TOTAL	2,000		2,000
1987	FEDERAL			
	STATE/LOCAL	2,000		2,000
	TOTAL	2,000		2,000
1992	FEDERAL			
	STATE/LOCAL	3,000		3,000
	TOTAL	3,000		3,000
TOTAL COSTS TO 1992	FEDERAL			
	STATE/LOCAL	15,000	62,000	77,000
	TOTAL	15,000	62,000	77,000

WHITEFISH

AIRPORT LAYOUT

CAUTION
R/W SOFT WHEN WET



MSASP AIRFIELD DEVELOPMENT COSTS IN THOUSANDS OF 1972 DOLLARS

WHITEFISH

		FED SHARE	TOTAL	FED GRANTS	STATE/LOCAL
	BEFORE 1977				
1	EXTEND RUNWAY(11-29)				
	A EARTHWORK	0.00	3.00	0.00	3.00
	B LAND ACQUISITION	0.00	3.24	0.00	3.24
	C EASEMENTS	0.00	0.56	0.00	0.56
	D SITE PREPARATION	0.00	1.68	0.00	1.68
	E DRAINAGE	0.00	1.80	0.00	1.80
2	STABILIZE RW(11-29)	0.00	52.00	0.00	52.00
	TOTAL ($000)		62.30	0.02	62.30
	TOTAL PROJECT COSTS		62.30	0.02	62.30

SLIDE 1 ARSLANDS

FEDERAL SHARE OF THE PROJECT COSTS

		FED SHARE	1977	1982	1987	1992
1	GA TERMINAL BUILDING AREA(SF)	0.00	0.	0.	0.	0.
2	GA AIRCRAFT LOADING POSITIONS(NUMBER)	0.00	0.	0.	0.	0.
3	GA AC LOADING & BYPASS APRON AREA(SY)	0.00	0.	0.	0.	0.
4	ITINERANT AIRCRAFT PARKING AREA(SY)	0.00	0.	0.	0.	0.
5	GA BASED AIRCRAFT TIE-DOWN AREA(SY)	0.00	0.	0.	0.	0.
6	GA CONV HANGAR BLDG AND APRON AREA(SY)	0.00	0.	0.	0.	0.
7	GA *T* HANGAR BLDG & APRON AREA(SY)	0.00	0.	0.	0.	0.
8	GA PUBLIC VEHICULAR PARKING SPACE(NO.)	0.00	0.	0.	0.	0.
9	GA PUBLIC VEHICULAR PARKIMG AREA(SY)	0.00	0.	0.	0.	0.
10	AIRPORT MAINTENANCE APRON AREA(SY)	0.00	0.	0.	0.	0.
11	AIRPORT MAINTENANCE BUILDING(SF)	0.00	0.	0.	0.	0.
	TOTAL IN THOUSANDS OF DOLLARS		0.0	0.0	0.0	0.0

SLIDE 1 ARSLANDS

PROJECT COST LESS FEDERAL GRANTS

		FED SHARE	1977	1982	1987	1992
1	GA TERMINAL BUILDING AREA(SF)	0.00	0.	0.	0.	0.
2	GA AIRCRAFT LOADING POSITIONS(NUMBER)	0.00	0.	0.	0.	0.
3	GA AC LOADING & BYPASS APRON AREA(SY)	0.00	1020.	0.	0.	0.
4	ITINERANT AIRCRAFT PARKING AREA(SY)	0.00	0.	0.	0.	0.
5	GA BASED AIRCRAFT TIE-DOWN AREA(SY)	0.00	1053.	525.	525.	525.
6	GA CONV HANGAR BLDG AND APRON AREA(SY)	0.00	816.	408.	408.	408.
7	GA *T* HANGAR BLDG & APRON AREA(SY)	0.00	1216.	608.	608.	608.
8	GA PUBLIC VEHICULAR PARKING SPACE(NO.)	0.00	0.	0.	0.	0.
9	GA PUBLIC VEHICULAR PARKIMG AREA(SY)	0.00	3742.	748.	748.	1497.
10	AIRPORT MAINTENANCE APRON AREA(SY)	0.00	378.	54.	54.	72.
11	AIRPORT MAINTENANCE BUILDING(SF)	0.00	105.	15.	15.	20.
	TOTAL IN THOUSANDS OF DOLLARS		8.3	2.4	2.4	3.1

WINIFRED

Winifred is in central Montana, southeast of the Missouri River White Cliffs area. Access to this town is very poor. County road 236 provides access south towards Lewistown (36 miles).

The airport is located just south of town. Only 'D & E' type aircraft are expected.

Facility Requirements

Only a small amount of land side expansion is anticipated throughout the forecast period. Airside items include extending and adding low intensity runway lights to runway (8-26) before 1977.

Name: WINIFRED

Site Number:. 12565.8

County:. FERGUS

District:. 6

PEAK HOUR IFR AND VFR DEMAND FORECASTS

	1977	1982	1987	1992
WINIFRED MONTANA				
TOTAL PEAK HOUR VFR DEMAND	3.	4.	4.	5.
GA IFR PEAK HOUR DEMAND	0.	0.	0.	1.

OPERATIONAL DATA

DEMAND FORECAST INDICATORS

	1977	1982	1987	1992
1 TOTAL GA ANNUAL OPERATIONS	1330.0	1670.0	1670.0	2000.0
2 GA PEAK HOUR OPERATIONS	3.0	4.0	4.0	5.0
3 PERCENT GA ITINERANT OPERATIONS	30.0	30.0	30.0	30.0
4 BASED AIRCRAFT UNDER 12500 LBS	2.0	3.0	4.0	5.0
5 BASED AIRCRAFT OVER 12500 LBS	0.0	0.0	0.0	0.0

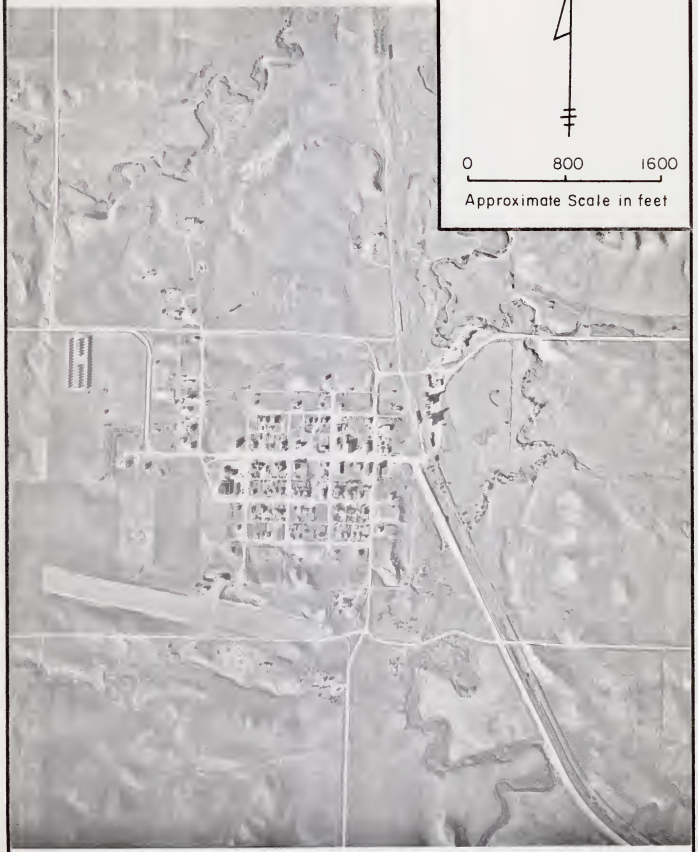
AIRCRAFT MIX AND CAPACITY FORECASTS

	1972	1977	1982	1987	1992
AIRCRAFT TYPE *A*	0	0	0	0	0
AIRCRAFT TYPE *B*	0	0	0	0	0
AIRCRAFT TYPE *C*	0	0	0	0	0
AIRCRAFT TYPE *D+E*	100	100	100	100	100
HOURLY CAPACITY VFR	85	92	99	99	99
HOURLY CAPACITY IFR	0	0	0	0	0
ANNUAL CAPACITY(000)	118	128	138	138	138

DEVELOPMENT COST SUMMARY

PLAN PERIOD	PARTICIPATION	LAND SIDE	AIR SIDE	TOTAL
BEFORE 1977	FEDERAL			
	STATE/LOCAL	$	$ 38,000	$ 38,000
	TOTAL		38,000	38,000
1977	FEDERAL			
	STATE/LOCAL	3,000		3,000
	TOTAL	3,000		3,000
1982	FEDERAL			
	STATE/LOCAL	2,000		2,000
	TOTAL	2,000		2,000
1987	FEDERAL			
	STATE/LOCAL	1,000		1,000
	TOTAL	1,000		1,000
1992	FEDERAL			
	STATE/LOCAL	1,000		1,000
	TOTAL	1,000		1,000
TOTAL COSTS TO 1992	FEDERAL			
	STATE/LOCAL	7,000	38,000	45,000
	TOTAL	7,000	38,000	45,000

WINIFRED



MSASP AIRFIELD DEVELOPMENT COSTS IN THOUSANDS OF 1972 DOLLARS

WINIFRED

	FED SHARE	TOTAL	FED GRANTS	STATE/LOCAL
BEFORE 1977				
1 EXTEND RUNWAY(8-26)				
A EARTHWORK	0.00	5.00	0.00	5.00
B LAND ACQUISITION	0.00	1.75	0.00	1.75
C EASEMENTS	0.00	0.60	0.00	0.60
D SITE PREPARATION	0.00	7.00	0.00	7.00
2 LIRL RW(8-26)	0.00	24.00	0.00	24.00
TOTAL ($000)		38.17	0.02	38.17
TOTAL PROJECT COSTS		38.17	0.02	38.17

AIRSIDE

FEDERAL SHARE OF THE PROJECT COSTS

	FED SHARE	1977	1982	1987	1992
1 GA TERMINAL BUILDING AREA(SF)	0.00	0.	0.	0.	0.
2 GA AIRCRAFT LOADING POSITIONS(NUMBER)	0.00	0.	0.	0.	0.
3 GA AC LOADING & BYPASS APRON AREA(SY)	0.00	0.	0.	0.	0.
4 ITINERANT AIRCRAFT PARKING AREA(SY)	0.00	0.	0.	0.	0.
5 GA BASED AIRCRAFT TIE-DOWN AREA(SY)	0.00	0.	0.	0.	0.
6 GA CONV HANGAR BLDG AND APRON AREA(SY)	0.00	0.	0.	0.	0.
7 GA *T* HANGAR BLDG & APRON AREA(SY)	0.00	0.	0.	0.	0.
8 GA PUBLIC VEHICULAR PARKING SPACE(NO.)	0.00	0.	0.	0.	0.
9 GA PUBLIC VEHICULAR PARKING AREA(SY)	0.00	0.	0.	0.	0.
10 AIRPORT MAINTENANCE APRON AREA(SY)	0.00	0.	0.	0.	0.
11 AIRPORT MAINTENANCE BUILDING(SF)	0.00	0.	0.	0.	0.
TOTAL IN THOUSANDS OF DOLLARS		0.0	0.0	0.0	0.0

LANDSIDE

PROJECT COST LESS FEDERAL GRANTS

	FED SHARE	1977	1982	1987	1992
1 GA TERMINAL BUILDING AREA(SF)	0.00	0.	0.	0.	0.
2 GA AIRCRAFT LOADING POSITIONS(NUMBER)	0.00	0.	0.	0.	0.
3 GA AC LOADING & BYPASS APRON AREA(SY)	0.00	0.	102a.	0.	0.
4 ITINERANT AIRCRAFT PARKING AREA(SY)	0.00	0.	0.	0.	0.
5 GA BASED AIRCRAFT TIE-DOWN AREA(SY)	0.00	273.	525.	525.	525.
6 GA CONV HANGAR BLDG AND APRON AREA(SY)	0.00	0.	0.	0.	0.
7 GA *T* HANGAR BLDG & APRON AREA(SY)	0.00	0.	0.	0.	0.
8 GA PUBLIC VEHICULAR PARKING SPACE(NO.)	0.00	0.	0.	0.	0.
9 GA PUBLIC VEHICULAR PARKING AREA(SY)	0.00	2245.	748.	0.	748.
10 AIRPORT MAINTENANCE APRON AREA(SY)	0.00	239.	61.	0.	59.
11 AIRPORT MAINTENANCE BUILDING(SF)	0.00	67.	17.	0.	17.
TOTAL IN THOUSANDS OF DOLLARS		2.8	2.4	0.5	1.4

WISDOM

The town is situated on the Big Hole River between the Pioneer and Beaverhead Mountains in southwest Montana. State Route 43 provides access west into Idaho and north towards Anaconda.

The airport is two miles south of town. State Route 278 is an improved-gravelled road providing access to the airport. Only 'D & E' type aircraft are expected.

Facility Requirements

Each benchmark period will require a small amount of land side expansion. The runway will need to be extended before 1977. A MIRL system and beacon will be added in 1977.

Name: WISDOM

Site Number: 12571

County: BEAVERHEAD

District: 12

PEAK HOUR IFR AND VFR DEMAND FORECASTS

	1977	1982	1987	1992
*WISDOM, MONTANA				
TOTAL PEAK HOUR VFR DEMAND	3.	4.	6.	8.
GA IFR PEAK HOUR DEMAND	0.	0.	1.	1.

OPERATIONAL DATA

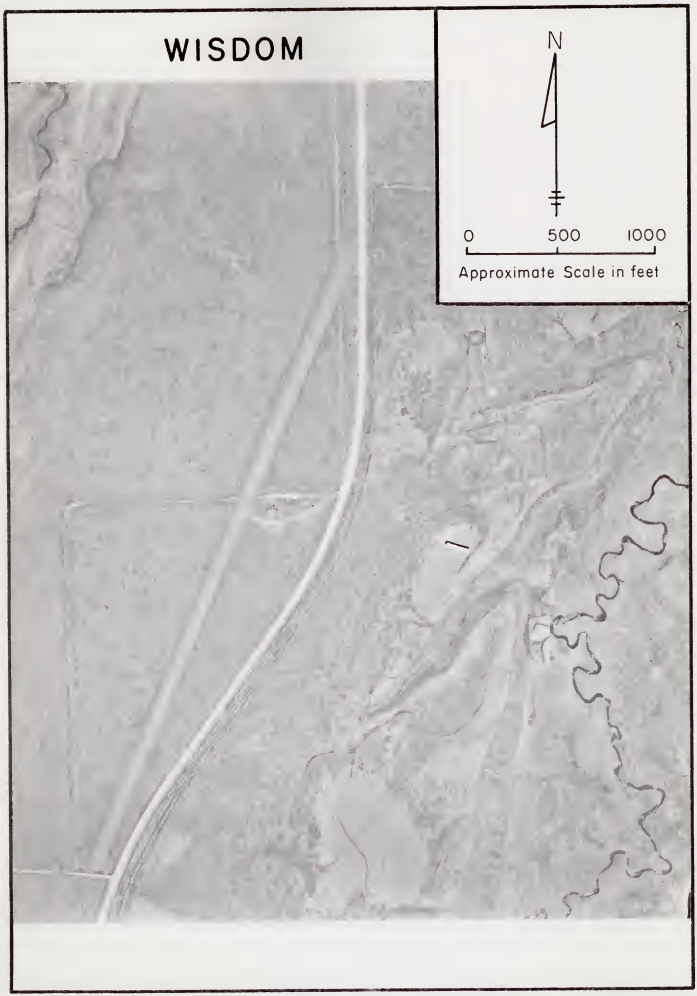
DEMAND FORECAST INDICATORS	1977	1982	1987	1992
1 TOTAL GA ANNUAL OPERATIONS	1500.0	1800.0	2400.0	3200.0
2 GA PEAK HOUR OPERATIONS	3.0	4.0	6.0	8.0
3 PERCENT GA ITINERANT OPERATIONS	100.0	100.0	95.0	90.0
4 BASED AIRCRAFT UNDER 12500 LBS	0.0	0.0	1.0	1.0
5 BASED AIRCRAFT OVER 12500 LBS	0.0	0.0	0.0	0.0

AIRCRAFT MIX AND CAPACITY FORECASTS

	1972	1977	1982	1987	1992
AIRCRAFT TYPE *A*	0	0	0	0	0
AIRCRAFT TYPE *B*	0	0	0	0	0
AIRCRAFT TYPE *C*	0	0	0	0	0
AIRCRAFT TYPE *D-E*	100	100	100	100	100
HOURLY CAPACITY VFR	85	92	99	99	99
HOURLY CAPACITY IFR	0	0	0	0	0
ANNUAL CAPACITY(000)	118	128	138	138	138

DEVELOPMENT COST SUMMARY

PLAN PERIOD	PARTICIPATION	LAND SIDE	AIR SIDE	TOTAL
BEFORE 1977	FEDERAL	$	$	$
	STATE/LOCAL		73,000	73,000
	TOTAL		73,000	73,000
1977	FEDERAL			
	STATE/LOCAL	5,000		5,000
	TOTAL	5,000		5,000
1982	FEDERAL			
	STATE/LOCAL	3,000		3,000
	TOTAL	3,000		3,000
1987	FEDERAL	3,000		3,000
	STATE/LOCAL	3,000		3,000
	TOTAL	6,000		6,000
1992	FEDERAL	2,000		2,000
	STATE/LOCAL	2,000		2,000
	TOTAL	4,000		4,000
TOTAL COSTS TO 1992	FEDERAL	5,000		5,000
	STATE/LOCAL	13,000	73,000	86,000
	TOTAL	18,000	73,000	91,000


WISDOM
N
0
500
1000
Approximate Scale in feet

MSASP AIRFIELD DEVELOPMENT COSTS IN THOUSANDS OF 1972 DOLLARS

WISDOM

AIRSIDE

	FED SHARE	TOTAL	FED GRANTS	STATE/LOCAL
BEFORE 1977				
1 EXTEND RUNWAY (1-19)				
A EARTHWORK	0.00	12.00	0.00	12.00
B RELOCATE ROAD	0.00	5.00	0.00	5.00
C LAND ACQUISITION	0.00	1.50	0.00	1.50
D EASEMENTS	0.00	0.50	0.00	0.50
E SITE PREPARATION	0.00	6.00	0.00	6.00
F OBSTRUCTION REMOVAL	0.00	1.00	0.00	1.00
G DRAINAGE	0.00	2.00	0.00	2.00
2 MIRL & BEACON	0.00	45.00	0.00	45.00
TOTAL ($000)		73.03	0.03	73.03
TOTAL PROJECT COSTS		73.03	0.03	73.03

LANDSIDE

FEDERAL SHARE OF THE PROJECT COSTS

	FED SHARE	1977	1982	1987	1992
1 GA TERMINAL BUILDING AREA(SF)	0.00	0.	0.	0.	0.
2 GA AIRCRAFT LOADING POSITIONS(NUMBER)	0.00	0.	0.	0.	0.
3 GA AC LOADING & BYPASS APRON AREA(SY)	79.46	0.	0.	810.	810.
4 ITINERANT AIRCRAFT PARKING AREA(SY)	79.46	0.	0.	1216.	1216.
5 GA BASED AIRCRAFT TIE-DOWN AREA(SY)	79.46	0.	0.	417.	0.
6 GA CONV HANGAR BLDG AND APRON AREA(SY)	79.46	0.	0.	162.	0.
7 GA #T# HANGAR BLDG & APRON AREA(SY)	79.46	0.	0.	161.	0.
8 GA PUBLIC VEHICULAR PARKING SPACE(NO.)	0.00	0.	0.	0.	0.
9 GA PUBLIC VEHICULAR PARKING AREA(SY)	0.00	0.	0.	0.	0.
10 AIRPORT MAINTENANCE APRON AREA(SY)	79.46	0.	0.	86.	114.
11 AIRPORT MAINTENANCE BUILDING(SF)	0.00	0.	0.	0.	0.
TOTAL IN THOUSANDS OF DOLLARS		0.0	0.0	2.9	2.1

PROJECT COST LESS FEDERAL GRANTS

	FED SHARE	1977	1982	1987	1992
1 GA TERMINAL BUILDING AREA(SF)	0.00	0.	0.	0.	0.
2 GA AIRCRAFT LOADING POSITIONS(NUMBER)	0.00	0.	0.	0.	0.
3 GA AC LOADING & BYPASS APRON AREA(SY)	79.46	1020.	1020.	209.	209.
4 ITINERANT AIRCRAFT PARKING AREA(SY)	79.46	1530.	1530.	314.	314.
5 GA BASED AIRCRAFT TIE-DOWN AREA(SY)	79.46	3.	0.	107.	0.
6 GA CONV HANGAR BLDG AND APRON AREA(SY)	79.46	0.	0.	246.	0.
7 GA #T# HANGAR BLDG & APRON AREA(SY)	79.46	0.	0.	447.	0.
8 GA PUBLIC VEHICULAR PARKING SPACE(NO.)	0.00	0.	0.	0.	0.
9 GA PUBLIC VEHICULAR PARKING AREA(SY)	0.00	2245.	748.	1497.	1497.
10 AIRPORT MAINTENANCE APRON AREA(SY)	79.46	270.	54.	22.	29.
11 AIRPORT MAINTENANCE BUILDING(SF)	0.00	75.	15.	30.	40.
TOTAL IN THOUSANDS OF DOLLARS		5.1	3.4	2.9	2.1

WOLF CREEK

Wolf Creek is situated in western Montana west of the Holter Dam and 15 miles east of the Continental Divide. Helena is 35 miles south on Interstate 15, which passes Wolf Creek one mile to the west.

The OxBow airstrip is three miles southeast of town on the OxBow grounds. 'D & E' aircraft activity has been forecasted.

Name: WOLF CREEK

Site Number:. 12401.1

County:. LEWIS AND CLARK

District:. 8

PEAK HOUR IFR AND VFR DEMAND FORECASTS

	1977	1982	1987	1992
WOLF CREEK, MONTANA				
TOTAL PEAK HOUR VFR DEMAND	1.	1.	1.	1.
GA IFR PEAK HOUR DEMAND	0.	0.	0.	0.

OPERATIONAL DATA

DEMAND FORECAST INDICATORS	1977	1982	1987	1992
1 TOTAL GA ANNUAL OPERATIONS	200.0	200.0	230.0	200.0
2 GA PEAK HOUR OPERATIONS	1.0	1.0	1.0	1.0
3 PERCENT GA ITINERANT OPERATIONS	100.0	100.0	100.0	100.0
4 BASED AIRCRAFT UNDER 12500 LBS	0.0	0.0	0.0	0.0
5 BASED AIRCRAFT OVER 12500 LBS	0.0	0.0	0.0	0.0

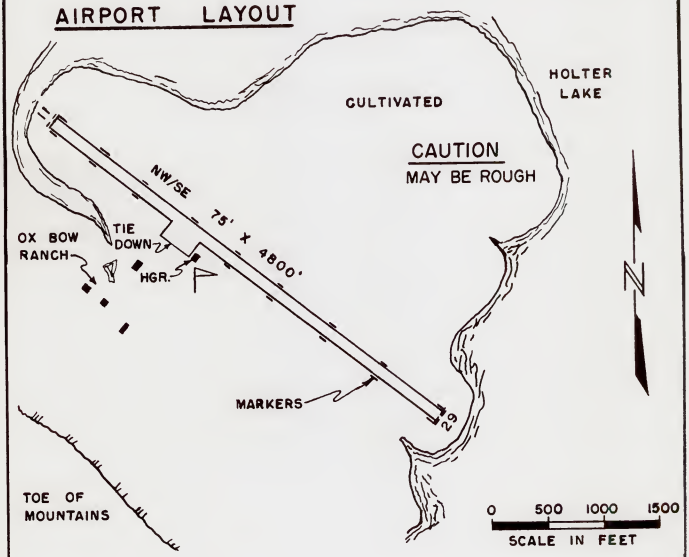
AIRCRAFT MIX AND CAPACITY FORECASTS

	1972	1977	1982	1987	1992
AIRCRAFT TYPE *A*	0	0	0	0	0
AIRCRAFT TYPE *B*	0	0	0	0	0
AIRCRAFT TYPE *C*	0	0	0	0	0
AIRCRAFT TYPE *D+E*	100	100	100	100	100
HOURLY CAPACITY VFR	85	92	99	99	99
HOURLY CAPACITY IFR	0	0	0	0	0
ANNUAL CAPACITY(000)	118	128	138	138	138

DEVELOPMENT COST SUMMARY

PLAN PERIOD	PARTICIPATION	LAND SIDE	AIR SIDE	TOTAL
BEFORE 1977	FEDERAL			
	STATE/LOCAL			
	TOTAL			
1977	FEDERAL			
	STATE/LOCAL	$ 1,000	$	$ 1,000
	TOTAL	1,000		1,000
1982	FEDERAL			
	STATE/LOCAL			
	TOTAL			
1987	FEDERAL			
	STATE/LOCAL			
	TOTAL			
1992	FEDERAL			
	STATE/LOCAL			
	TOTAL			
TOTAL COSTS TO 1992	FEDERAL			
	STATE/LOCAL	1,000		1,000
	TOTAL	1,000		1,000

WOLF CREEK


AIRPORT LAYOUT
HOLTER LAKE
CULTIVATED
CAUTION
MAY BE ROUGH
NW/SE 75' X 4800'
TIE DOWN
OX BOW RANCH
HGR.
MARKERS
29
TOE OF MOUNTAINS
N
0 500 1000 1500
SCALE IN FEET

WOLF CREEK

NO AIR SIDE DEVELOPMENTS REQUIRED

LANDSIDE

FEDERAL SHARE OF THE PROJECT COSTS

	FED SHARE	1977	1982	1987	1992
1 GA TERMINAL BUILDING AREA(SF)	0.00	0.	0.	0.	0.
2 GA AIRCRAFT LOADING POSITIONS(NUMBER)	0.00	0.	0.	0.	0.
3 GA AC LOADING & BYPASS APRON AREA(SY)	0.00	0.	0.	0.	0.
4 ITINERANT AIRCRAFT PARKING AREA(SY)	0.00	0.	0.	0.	0.
5 GA BASED AIRCRAFT TIE-DOWN AREA(SY)	0.00	0.	0.	0.	0.
6 GA CONV HANGAR BLDG AND APRON AREA(SY)	0.00	0.	0.	0.	0.
7 GA #T# HANGAR BLDG & APRON AREA(SY)	0.00	0.	0.	0.	0.
8 GA PUBLIC VEHICULAR PARKING SPACE(NO.)	0.00	0.	0.	0.	0.
9 GA PUBLIC VEHICULAR PARKING AREA(SY)	0.00	0.	0.	0.	0.
10 AIRPORT MAINTENANCE APRON AREA(SY)	0.00	0.	0.	0.	0.
11 AIRPORT MAINTENANCE BUILDING(SF)	0.00	0.	0.	0.	0.
TOTAL IN THOUSANDS OF DOLLARS		0.0	0.0	0.0	0.0

PROJECT COST LESS FEDERAL GRANTS

	FED SHARE	1977	1982	1987	1992
1 GA TERMINAL BUILDING AREA(SF)	0.00	0.	0.	0.	0.
2 GA AIRCRAFT LOADING POSITIONS(NUMBER)	0.00	0.	0.	0.	0.
3 GA AC LOADING & BYPASS APRON AREA(SY)	0.00	0.	0.	0.	0.
4 ITINERANT AIRCRAFT PARKING AREA(SY)	0.00	0.	0.	0.	0.
5 GA BASED AIRCRAFT TIE-DOWN AREA(SY)	0.00	3.	0.	0.	0.
6 GA CONV HANGAR BLDG AND APRON AREA(SY)	0.00	0.	0.	0.	0.
7 GA #T# HANGAR BLDG & APRON AREA(SY)	0.00	0.	0.	0.	0.
8 GA PUBLIC VEHICULAR PARKING SPACE(NO.)	0.00	0.	0.	0.	0.
9 GA PUBLIC VEHICULAR PARKING AREA(SY)	0.00	748.	0.	0.	0.
10 AIRPORT MAINTENANCE APRON AREA(SY)	0.00	36.	0.	0.	0.
11 AIRPORT MAINTENANCE BUILDING(SF)	0.00	10.	0.	0.	0.
TOTAL IN THOUSANDS OF DOLLARS		0.8	0.0	0.0	0.0